EPA Jacket 62719-695

Dow AgroSciences

Dow AgroSciences LLC
9330 Zionsville Road Indianapolis, IN 46268 USA

www.dowagro.com

January 12, 2018

Kathryn V. Montague / PM-23 (7505P)
Office of Pesticide Programs
U.S. Environmental Protection Agency
One Potomac Yard (South Building)
2777 South Crystal Drive
Arlington, VA 22202-4501

ENLIST DUO (A.I. 2,4-DICHLOROPHENOXYACETIC AND GLYPHOSATE) AND GF-3335/ENLIST ONE (A.I. 2,4-DICHLOROPHENOXYACETIC)
EPA REGISTRATION NUMBER: 62719-649 AND 62719-695

Dear Ms. Montague:

Pursuant to the Condition of Registration no. 10 or 11 respectively and Appendix D, section D, subsection 1 of EPA's January 12, 2017, Notice of Pesticide Registration of ENLIST DUO (EPA Reg. Number: 62719-649) and January 31, 2017, Notice of Pesticide Registration of GF-3335/ENLIST ONE (EPA Reg. Number: 62719-695), Dow AgroSciences encloses the following information entitled:

Use of the Enlist™ Weed Control System During 2017

- *Electronic copy (CD)*

If you have questions, please contact Diego Fonseca at 317- 337-4693.

Sincerely,

Diego Fonseca
Regulatory Leader – Regulatory Affairs
317-337-4693
317-337-4649 (FAX)
dfonseca@dow.com

Enclosures

Use of the Enlist® Weed Control System During 2017

Appendix D, Part D: Reporting Component:

a. Annual sales of Enlist seed and Enlist herbicides by state; (Appendix A)

b. The current grower agreement.

The current Technology Use Agreement (TUA) with DAS, referred to as a "grower agreement" in EPA's January 12, 2017, Notice of Pesticide Registration of ENLIST DUO (EPA Reg. Number: 62719-649) and January 31, 2017, Notice of Pesticide Registration of GF-3335/ENLIST ONE (EPA Reg. Number: 62719-695), is available at, http://www.dowagro.com/en-us/traitstwd/united-states/technology-use-agreement.

c. The first annual report shall include the current education program and associated materials.

The current education program and associated materials were listed in the " **Herbicide Resistance Management Education Program for the Enlist™ Weed Control System"** report submitted to the USEPA on March 8, 2017. There have been no material changes to this education program since this previous submission, which include the following elements:

a. The education program shall identify appropriate best management practices (BMPs), set forth under "Best Management Practices (BMPs) Component," listed in Appendix D, section E, subsection 1 of EPA's January 12, 2017 and January 31, 2017, Notice of Pesticide Registrations, to avoid and control weed resistance, and shall convey to growers the importance of complying with BMPs;

b. The education program shall include at least one written communication regarding herbicide resistance management each year to purchasers of Enlist seed (separate and apart from the grower agreement document); All Enlist growers will receive, at a minimum, a hard copy of the Product Use Guide (s) in 2018.

c. You must make the education program available to DAS sales representatives for distribution to growers. Education materials remain on-line for easy accessibility to the DAS sales force and growers.

d. Summary of your efforts aimed at achieving compliance with the grower agreements.

Dow AgroSciences (DAS) has a written process and trained employees to evaluate and address any issues; however, in 2017, there were no reported allegations from Enlist growers of non-performance, lack of herbicide efficacy, or likely resistance associated with the use of Enlist herbicides. In the 2017 season, there were zero official complaints registered with any state department of agriculture / state plant board regarding Enlist herbicides.

DAS growers are informed that before they can legally obtain, plant, or grow crops containing the DAS traits, they must have a valid, executed TUA. DAS will continue to communicate this and provide easy access for DAS growers to the TUA though our website, traitstewardship.com, by calling 877-4-TRAITS (877-487-2487), and/or by contacting their seed seller. DAS will also continue to inform all growers that they can electronically sign the agreement at AgCelerate.com or through the AgCelerate app.

All Enlist soybean growers participated in the "Field Forward" program. These growers grew Enlist soybeans for the sole purpose of seed production and were required to be under a contract and follow DAS processes. All growers signed a TUA, and followed the TUA requirements. Therefore, DAS is confident that these growers did not apply an herbicide containing 2, 4-D that does not feature Colex-D technology, after planting.

Enlist cotton growers were required, by DAS, to have a signed grower agreement to obtain access to the Enlist cotton seed, and were in compliance with the Dow AgroSciences Technology Use Agreement.

e. *Summary of your determinations as to whether any reported lack of herbicide efficacy was "likely resistance," your follow-up actions taken, and, if available, the ultimate outcome (e.g., evaluation of success of additional*

weed control measures) regarding each case of "likely resistance." In the annual report, DAS will list the cases of likely resistance by county and state.

As noted above, there were no alleged incidents or observations of lack of herbicide efficacy.

f. The results of the annual survey described in paragraph 1 under "Evaluation Component," above, including whether growers are implementing herbicide resistance BMPs, and a summary of your annual review and possible modification – based on that survey – of the education program, grower agreement compliance efforts, and response to reports of likely resistance, described in paragraph 2 under "Evaluation Component," above.

Enlist cotton growers were selected to participate in a survey regarding use of the Enlist weed control system. Growers participating in the survey were from Alabama, Arkansas, Georgia, Missouri, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas

100% of the growers surveyed used Enlist herbicides, and none applied an herbicide that contained 2,4-D without the Colex-D Technology, after planting. Growers were generally satisfied with wee control from Enlist herbicides. With Enlist Duo, one-third claimed the broadleaf weed control received was less than 90% and half claimed additional control was needed following the initial application of Enlist Duo. With Enlist One, one-fourth claimed the broadleaf weed control was less than 90% and one-third claimed additional control was needed following the initial application of Enlist One.

Growers using the Enlist Weed Control System in the survey responded that they were educated via multiple sources on the use of the Enlist Weed Control System and herbicide resistance best management practices. Per survey results, the top five most effective education tools were DAS personnel, the product labels, the Enlist Product Use Guide, the Enlist.com website and Enlist show farms/field days.

A description of the Enlist herbicide information Dow AgroSciences provides is as follows;

The Enlist Weed Control System Product Use Guide (PUG) details requirements and recommendations for the planting of Enlist crops and the proper use of Enlist herbicides with Colex-D Technology. Referencing the Technology Use Agreement (TUA) that purchasers of Enlist crops are required to sign, the PUG will remind growers of their contractual obligation to only use DAS Authorized Herbicide Products in conjunction with Enlist crops and to follow herbicide resistance management practices. The PUG provides growers with details regarding how herbicide resistance spreads, the importance of having different herbicide modes of action in one product, and steps they can take to help delay or prevent herbicide resistance. DAS will continue to provide the Enlist PUG to all our Enlist growers, and revise it as appropriate.

The Enlist.com website provides easy access to the product labels, Safety Data Sheets, Product Use Guides, information on the product technology, sprayer cleanout, quick reference guides, nozzle selection, qualified tank mix products, etc. DAS will continue to support and improve the Enlist.com website.

In addition to the many DAS sales representatives in the field, there are many Enlist Field Specialists located in different regions of the US. Enlist Field Specialists' primary responsibilities are to provide timely response to these inquiries, and educate and retrain the growers to ensure that they are using best practices to avoid developing a resistant weed population. An extensive network of knowledgeable Dow AgroSciences sales representatives, field scientists, and agronomists play an important role in educating and training retailers, growers and applicators on herbicide resistance management and the proper use of Enlist™ herbicides and will continue to play this role in the future.

DAS will continue to provide each of these education tools to our growers for the 2018 season.

Dow AgroSciences is committed to promoting the responsible use and stewardship of its products. We will continue to provide Enlist training and promote the Enlist Ahead management resource with growers and applicators to help them get the best results from the Enlist Weed Control System.

g. Summary of the status of any laboratory and greenhouse testing performed by, or at the direction of, Dow AgroSciences following up on incidents of likely resistance, performed in the previous year.

As noted above, there were no alleged incidents or observations of lack of herbicide efficacy, and thus no need for such testing.

Pages 6-7*Claimed confidential by submitter*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 11, 2017

Mr. Diego Fonseca
Regulatory Manager
Dow AgroSciences
9330 Zionsville Rd.
Indianapolis, IN 46268

Subject: Notification per PRN 98-10 – Adding Alternate Brand Name
Product Name: GF-3335
EPA Registration Number: 62719-695
Application Date: June 7, 2017
Decision Number: 530372

Dear Mr. Fonseca:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The alternate brand name ENLIST ONE has been added to the product record.

If you have any questions, you may contact Kathryn Montague at 703-305-1243 or via email at montague.kathryn@epa.gov.

Sincerely,

Kathryn V. Montague

Kathryn Montague, Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Receipt for Section 3

S: 1004779 Milestone Email:

Regulatory Type: Product Registration - Section 3

Application Type: Notification

Fee For Service: Yes No

Print Letter

Enter More Information

Tracking

Company: 62719 DOW AGROSCIENCES LLC

Risk Manager: Registration Division, Risk Management Team 23

Product #: 62719-695 Product Name: GF-3335

Me Too Section3:

Me Too Product Name:

Application Date: 07-Jun-2017

OPP Rec'vd Date: 09-Jun-2017

Front End Date: 09-Jun-2017

Risk Manager Send Date: 09-Jun-2017

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Receipt Content | Des

Paper Label

View/Edit

Receipt Description:

Notification per PR Notice 98-10

ABN Due 09 July 2017

"Enlist One"

Dec# 530372

Dow AgroSciences

Dow AgroSciences LLC
9330 Zionsville Road Indianapolis, IN 46268 USA

www.dowagro.com

308/2E
June 7, 2017

Document Processing Desk (**NOTIF**)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

GF-3335 (A.I. 2,4-DICHLOROPHENOXYACETIC ACID CHOLINE SALT)
EPA REGISTRATION NUMBER: 62719-695
NOTIFICATION OF ALTERNATE BRAND NAME PER PR NOTICE 98-10

Per PR Notice 98-10, Dow AgroSciences is notifying the EPA of an alternate brand name for GF -3335 herbicide. The alternate brand name is Enlist One™

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Contents of Submission

- Transmittal document (this letter)
- Application for Pesticide, EPA Form 8570-1
- Label entitled GF-3335 (K1A / GF-3335 / Notif / 06-07-17) (20 Pages plus Registration Notes) (1 Copy)

If you require further information, please contact Ronda Brown, Regulatory Specialist at (317) 337-4563 or via e-mail at [rrbrown2@dow.com].

Sincerely,

Ronda Brown for

Diego Fonseca
Regulatory Leader
(317) 337-4693
(317) 337-4649 (FAX)

Enclosures

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

EPA United States **Environmental Protection Agency** Washington, DC 20460

☐ Registration ☐ Amendment ☑ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
Dow AgroSciences/62719-695	Kathryn Montague	☑ None ☐ Restricted
4. Company/Product (Name)	**PM#**	
Dow AgroSciences/GF-3335	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

☐ *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

☐ Amendment - Explain below.

☐ Resubmission in response to Agency letter dated _____

☑ Notification - Explain below.

☐ Final printed labels in repsonse to Agency letter dated _____

☐ "Me Too" Application.

☐ Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

ABN for GF-3335 of Enlist One™

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	☐ Metal ☑ Plastic ☐ Glass ☐ Paper ☐ Other (Specify) _____
***Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☑ Label ☐ Container	1 gal, 55 gal	☑ Label on container

6. Manner in Which Label is Affixed to Product ☑ Lithograph Paper glued Stenciled ☐ Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Diego Fonseca	Regulatory Manager	(317) 337-4693

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingllly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Ronda Brown for	Regulatory Manager
4. Typed Name	**5. Date**
Diego Fonseca	June 7, 2017

GF-3335

EPA Reg. No. 62719-695
[Alternate Brand Name: Enlist One™]

Registration Notes:

Source Label based on EPA accepted label dated January 31, 2017 with revision requested:

1. Add EPA Reg. Number of 62719-695.

Also Non-Notification dated March 3, 2017

1. Add in missing trademark line to base label and to booklet cover.

Also Notification dated June 7, 2017

1. Add Alternate Brand Name (ABN) of Enlist One™

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
62719-695	01/31/2017
	Date of Expiration: 01/12/2022

Term of Issuance: Conditional

Name of Pesticide Product: GF-3335

Name and Address of Registrant (include ZIP Code):

Diego Fonseca
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Kathryn V. Montague

Kathryn V. Montague, Product Manager 23
Herbicide Branch, Registration Division (7505P)

Date: 1/31/17

EPA Form 8570-6

2. You are required to comply with the data requirements described in the DCI Order identified below:

   a. 2,4-D GDCI-030063-1362

   You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:
   http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

4. Make the following label changes before you release the product for shipment:

   - Revise the EPA Registration Number to read, "EPA Reg. No. 62719-695."

5. Submit one copy of the final printed label for the record before you release the product for shipment.

6. This registration will automatically expire on January 12, 2022.

7. You must maintain a website at http://GF-3335Tankmix.com . That website will include a list of products that have been tested pursuant to Appendix A and found, based upon such testing, not to adversely affect the spray drift properties of GF-3335. The website will identify a testing protocol, consistent with Appendix A, that is appropriate for determining whether the tested product will adversely affect the drift properties of GF-3335. The website will state that any person seeking to have a product added to the list must perform a study either pursuant to the testing protocol identified on the website or another protocol that has been approved for the purpose by EPA, and must submit the test data and results, along with a certification that the study was performed either pursuant to the testing protocol identified on the website or pursuant to another protocol approved by EPA and that the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of GF-3335, to EPA. EPA will notify you when the Agency determines that a product has been certified to be appropriately added to the list, and you will add appropriately certified products to the list no more than 90 days after you receive such notice from EPA. Testing of Tank-Mix Products must be conducted in compliance with procedures as stated forth in Appendix A.

8. All test data relating to the impact of tank-mixing any product with GF-3335 on drift properties of GF-3335 generated by you or somebody working for you must be submitted to EPA, along with a certification indicating whether the study was performed either pursuant to the testing protocol identified on the website or pursuant to another protocol approved by EPA and whether the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of GF-3335, at the following address: Chief of Environmental Risk Branch 1, Environmental Fate and Effects Division, Office of Pesticide Programs. If the certification states that the study was performed either

pursuant to the testing protocol identified on the website or pursuant to another protocol approved by EPA, and the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of GF, you may add the product to the list.

9. The prohibition of using products in a tank-mix with GF-3335 unless the product used is contained on the list at GF-3335Tankmix.com, and the identification of the website address, shall be included in educational and information materials developed for GF-3335, including the materials identified in Appendix D, Section B(1).

10. You must develop and follow an Herbicide Resistance Management Plan (HRM) as laid out in Appendix D regarding grower agreements, field detection and remediation, education, evaluation, reporting, and best management practices (BMPs).

11. On an annual basis, you must report your survey results on growers' adherence to the terms of the grower agreements regarding whether purchasers of Enlist seed are using forms of 2,4-D that do not have the low-drift/volatility characteristics of GF-3335. These reports must be submitted to the Agency no later than January 15th of each year. See Appendix D Section D.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 1/8/2015

If you have any questions, please contact Emily Schmid by phone at 703-347-0189, or via email at schmid.emily@epa.gov.

Enclosure

APPENDIX A

Testing of Tank Mix Products

Products proposed for tank-mixing with Enlist Solo may be added to the list of products that will not adversely affect the spray drift properties of Enlist Solo contained on the web site if a study is performed under the testing conditions set forth below; the test information is reported as set forth below; and the results are interpreted as set forth below and the interpretation supports adding the tested product to the list of products that will not adversely affect the spray drift properties of Enlist Solo.

The purpose of this study is to show that spray drift deposition 30 feet downwind from the proposed tank mix (that includes Enlist Solo) does not exceed that of a reference formulation (Enlist Duo). Deposition from the reference formulation, as measured in a field study, did not result in exposures 30 or more feet downwind from application that would trigger risk concerns.

Using application conditions encountered in the field study with Enlist Duo, AGDISP deposition estimates for Enlist Duo can be generated and serve as a surrogate for the results of the field study and as a basis of comparison of the effects of formulation on spray drift formulation. Therefore, AGDISP estimates for proposed tank mixtures that include Enlist Solo can be compared with the estimates made by the AGDISP model for the reference formulation (Enlist Duo) to determine if pesticide deposition estimates at the 30-foot downwind distance are comparable and therefore also comparable to the field test generated pesticide deposition establishing the threshold point for no risk concerns.

To accomplish these comparisons, the effects of formulation and tank mixture on spray droplet spectra must be determined because this is an important input to the AGDDISP model. Furthermore, to control for differences in instrument calibration and local environmental conditions that could confound any comparisons, testing from spray droplet spectra for a proposed tank mixture with Enlist Solo must also be accompanied by a determination of the droplet spectrum for the reference formulation (Enlist Duo).

The following sections describe the approach for determining droplet spectra for the various test articles based on spray chamber or wind tunnel tests. In addition, the description of approach for conducting AGDISP spray drift model estimation and then comparison of the results is included.

Testing Conditions

Perform a spray chamber test using the conditions described in ASTM E-2798-11; or a wind tunnel test using the conditions described in "EPA Final Generic Verification Protocol for Testing Pesticide Application Spray Drift Reduction Technologies for Row and Field Crops" (September 2013).

Testing Media:	1) Enlist Duo and 2) Enlist Solo + Proposed Tank Mix
Test Nozzle:	AIXR 11004 at 40 psi

Number of Replicates: 3 for each tested medium

Reporting

Report the validation information summarized in Appendix B.

Report the full droplet spectrum for each replicate of each medium tested in the spray chamber or wind tunnel test.

Perform an AGDISP (v8.26) modeling run for each replicate droplet spectrum for each tested medium (AGDISP input parameters are described in Appendix C).

Establish the spray drift deposition estimate (eg. as fraction of application rate) at 30 feet downwind for each replicate for each tested medium using the AGDISP Terrestrial Point Deposition Assessment.

Establish the mean and standard deviation of the AGDISP deposition estimates at 30 feet downwind for the 3 replicates of each tested medium.

Perform a one-tail (upper-bound) t-test (p=0.1) to determine if the mean AGDISP spray drift deposition estimate at 30 feet downwind for the proposed tank-mix product (including Enlist Solo) is significantly greater than the same estimate for the Enlist Duo formulation.

Interpretation of Results

If the mean AGDISP spray drift deposition estimate at 30 feet downwind for the proposed tank-mix product (that includes Enlist Solo) is not significantly greater than the same estimate for Enlist Duo, then the proposed tank-mix product can be added to the list of products that will not adversely affect the spray drift properties of Enlist Solo contained on the web site.

If the mean AGDISP 30-foot deposition estimate for the proposed tank-mix product is significantly greater than the mean AGDISP 30-foot deposition estimate for Enlist Duo, then the proposed tank-mix product cannot be added to the list of products that will not adversely affect the spray drift properties of Enlist Solo contained on the web site.

Results from other testing protocols will be acceptable for adding products to the list of products that will not adversely affect the spray drift properties of Enlist Solo provided that EPA has determined in writing that such other protocol is appropriate for such purpose.

APPENDIX B

Validation Criteria

a. Detailed information of instrument setting and measurements, including:
   - The distance from the nozzle tips to the laser settings
   - Measurements of airspeed and liquid flow rate
b. Detailed information of test substances, including:
   - Volume composition and density of Enlist Duo formulation (2,4-D choline and glyphosate) and tank mixes including Enlist Solo
c. Summary of the entire spray output distribution for each combination of nozzle and tank mix, with statistical analysis of replicates
d. Graphical outputs of Sympatec Helos laser diffraction particle size analyzer FOR individual spectrum Report of Dv0.1 (SD), Dv0.5 (SD), and DV0.9 (SD) as well as mean % fines of (≤ 141μm SD) fractions

APPENDIX C

AGDISP (v8.26) is run for each replicate droplet spectrum for each medium tested in a spray chamber or wind tunnel test. Model inputs should be specific to the spray material of each medium and to the meteorological conditions of the spray chamber or wind tunnel test. Example inputs follow below for a test of the reference compound (Enlist Duo):

AGDISP Input Parameters

Parameter	Value	comments
Application method section		
Method	Ground	
Nozzle type	Flat fan (Default)	The direct use of the DSD overrides the use of "Nozzle type.
Boom pressure	40 psi	If nozzles/tank mixes were tested at 40 psi. It has to be consistent with tank mix as well as Enlist for both TeeJet and AIXR nozzles.
Release height	3 ft	Default
Spray lines	20	Default
Meteorology section		
Wind type	Single height	Default
Wind speed	15 mph	Under bound from label
Wind direction	-90 deg	Worst-case and default
Temperature	65 F	Default
Relative humidity	50%	Default
Surface section		
Angles	0	Default
Canopy	None	Default
Surface roughness	0.12 ft	Mean of "crops" cover type
Application technique section		
Nozzles	54, even spacing	Standard boom setup
DSD	From wind tunnel results, imported in library	
Atmospheric stability	Strong	Default

Swath section		
Swath width	90 ft	Standard boom
Swath displacement	0 ft	Worst-case
Spray material section		
Spray volume rate	15 gal/acre	From Enlist Duo label
Volatile/nonvolatile fraction	Enlist Duo at 2.8% v/v	To calculate volatile/nonvolatile fraction in the tank mix for the model input, provide detailed information of the tested formulations and tank mixes. See sample calculation below used in WT study submitted by DOW (MRID 49384801)[1]

[1]The tested mixture was 2.8% (v/v) Enlist Duo in water. Enlist Duo has a density of 1.171 kg/L and contains 24.42 % (w/w) of 2,4-D choline salt (16.65% (w/w) 2,4-D acid equivalent) and 22.17% (w/w) glyphosate dimethylammonium salt.
For example, a 100-liter batch would contain the following:
Enlist Duo 2.8% * 100 L = 2.8L; 2.8L * 1.171 kg/L = 3.279 kg
Water: 100 -2.8 L = 97.2 L = 97.2 kg
Total weight: 3.279+97.2 = 100.497 kg
Active ingredient fraction: 3.279 kg * 16.65 % (a.e.) = 0.546 kg; 0.546 kg/100.497 kg = **0.0054** (dimensionless)
Non-volatile fraction: 3.279 kg* (24.42 % + 22.17%) = 1.528 kg; 1.528 kg/100.497 kg = **0.0152** (dimensionless)

APPENDIX D
Herbicide Resistance Management Plan

Dow AgroSciences (DAS) must:

A. Grower Agreements, Field Detection and Remediation Components:

1. Ensure that any person who purchases any Enlist seed sign a binding contract, enforceable by DAS, herein referred to as a "grower agreement." In such grower agreement, DAS will reinforce with users of Enlist Solo the critical importance of following resistance management practices. This includes stressing the need for pre- and post-application field scouting and that lack of herbicide efficacy should be reported promptly to DAS or its representative.

2. Provide a copy of the grower agreement to EPA;

3. Retain copies of all executed grower agreements for a period of 3 years from the date of execution, and make such copies available to EPA upon request;

4. If any grower informs you of a lack of herbicide efficacy, then you or your representative must make an effort to evaluate the field for "likely resistance" to Enlist Solo by applying the criteria set forth in Norsworthy, *et al.*, "Reducing the Risks of Herbicide Resistance: Best Management Practices and Recommendations," Weed Science 2012 Special Issue:31–62 (*hereinafter* "Norsworthy criteria");

5. Keep records of all field evaluations for "likely resistance" for a period of 3 years, and make such copies available to EPA upon request; and

6. If one or more of the Norsworthy criteria are met, then:

    a. Provide the grower with specific information and recommendations to control and contain likely resistant weeds, including retreatment and/or other non-chemical controls, as appropriate. If requested by the grower, DAS will become actively involved in implementation of weed control measures;

    b. Request, at the time of the initial determination that one or more of the Norsworthy criteria are met and prior to any application of alternative control practices, that the grower provide you with access to the relevant field(s) to collect specimens of the likely resistant weeds (potted specimens or seeds) for further evaluation in the greenhouse or laboratory, and so collect such specimens if possible (or, alternatively, request that the grower provide such specimens to you, at your expense);

    c. Commence greenhouse or laboratory studies to confirm resistance as soon as practicable following sample collection;

d. To the extent possible, contact or visit the grower in an appropriate timeframe after implementation of the additional weed control measures in order to evaluate success of such measures; and

e. If the additional weed control measures were not successful in controlling the likely resistant weeds, then:

i. Work with the grower to determine the reason(s) why the additional control measures were not successful;

ii. Report annually the inability to control the likely resistant weeds to relevant stakeholders; and

iii. Offer to further assist the grower in controlling and containing the likely resistant weeds, including retreatment and/or other non-chemical controls, as appropriate.

B. Educational / Informational Component:

1. Develop and implement an education program for growers that includes the following elements:

a. The education program shall identify appropriate best management practices (BMPs), set forth under "Best Management Practices (BMPs) Component," below, to avoid and control weed resistance, and shall convey to growers the importance of complying with BMPs;

b. The education program shall include at least one written communication regarding herbicide resistance management each year to purchasers of Enlist seed (separate and apart from the grower agreement document); and

c. You must make the education program available to DAS sales representatives for distribution to growers.

2. Provide to EPA the original education program within three months of the issuance of this registration.

C. Evaluation Component:

1. Annually conduct a survey of users of Enlist seed. This survey must be based on a statistically representative sample of users of Enlist seed. The sample size and geographical resolution should be adequate to allow analysis of responses within regions, between regions, and across the United States. This survey shall evaluate, at a minimum, the following:

a. Growers' adherence to the terms of the grower agreements, and

b. Whether growers have encountered any perceived issue with non-performance or lack of efficacy of Enlist Solo and, if so, how growers have responded.

2. Utilize the results from the survey described in paragraph 1 of this section to annually review, and modify as appropriate for the upcoming growing season, the following:

a. Efforts aimed at achieving compliance with the grower agreement;

b. Responses to incidents of likely resistance and confirmed resistance; and

c. The education program. At the initiative of either EPA or DAS, EPA and DAS shall consult about possible modifications of the education program.

D. Reporting Component:

1. Submit annual reports to EPA by January 15th of each year, beginning on January 15, 2016. Such reports shall include:

a. Annual sales of Enlist seed and Enlist Solo herbicide by state;

b. The current grower agreement;

c. The first annual report shall include the current education program and associated materials, and subsequent annual reports shall include updates of any aspect of the education program and associated materials that have materially changed since submission of the previous annual report;

d. Summary of your efforts aimed at achieving compliance with the grower agreements;

e. Summary of your determinations as to whether any reported lack of herbicide efficacy was "likely resistance," your follow-up actions taken, and, if available, the ultimate outcome (e.g., evaluation of success of additional weed control measures) regarding each case of "likely resistance." In the annual report, DAS will list the cases of likely resistance by county and state.

f. The results of the annual survey described in paragraph 1 under "Evaluation Component," above, including whether growers are implementing herbicide resistance BMPs, and a summary of your annual review and possible modification – based on that survey – of the education program, grower agreement compliance efforts, and response to reports of likely resistance, described in paragraph 2 under "Evaluation Component," above; and

g. Summary of the status of any laboratory and greenhouse testing performed by, or at the direction of, Dow AgroSciences following up on incidents of likely resistance, performed

in the previous year. Data pertaining to such testing need not be included in the annual reports, but such data must be made available to EPA upon request.

2. Following your submission of the annual report, you shall meet with the EPA at EPA's request in order to evaluate and consider the information contained in the report.

E. ***Best Management Practices (BMPs) Component:***

1. Best management practices (BMPs) must be identified in your education program. You must advise growers to follow them in your grower agreements. The following are examples of BMPs:

   a. Regarding crop selection and cultural practices:

      i. Understand the biology of the weeds present.

      ii. Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil seed-bank.

      iii. Emphasize cultural practices that suppress weeds by using crop competitiveness.

      iv. Plant into weed free fields, keep fields as weed free as possible, and note areas where weeds were a problem in prior seasons.

      v. Incorporate additional weed control practices whenever possible, such as mechanical cultivation, biological management practices, crop rotation, and weed-free crop seeds, as part of an integrated weed control program.

      vi. Do not allow weed escapes to produce seeds, roots or tubers.

      vii. Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.

      viii. Prevent field-to-field and within-field movement of weed seed or vegetative propagules.

      ix. Thoroughly clean plant residues from equipment before leaving fields.

      x. Prevent an influx of weeds into the field by managing field borders.

      xi. Fields must be scouted before application to ensure that herbicides and application rates will be appropriate for the weed species and weed sizes present.

      xii. Fields must be scouted after application to confirm herbicide effectiveness and to detect weed escapes.

xiii. If resistance is suspected, treat weed escapes with an alternate mode of action or use non-chemical methods to remove escapes.

b. Regarding herbicide selection:

i. Use a broad spectrum soil applied herbicide with a mechanism of action that differs from this product as a foundation in a weed control program.

ii. A broad spectrum weed control program should consider all of the weeds present in the field. Weeds should be identified through scouting and field history.

iii. Difficult to control weeds may require sequential applications of herbicides with alternative mechanisms of action.

iv. Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action.

v. Apply full rates of this herbicide for the most difficult to control weed in the field. Applications should be made when weeds are at the correct size to minimize weed escapes.

vi. Do not use more than two applications of this herbicide or any herbicide with the same mechanism of action within a single growing season unless mixed with another mechanism of action herbicide with overlapping spectrum for the difficult to control weeds.

vii. Report any incidence of lack of efficacy of this product against a particular weed species to Dow AgroSciences or a Dow AgroSciences representative.

This list may be updated or revised as new information becomes available.

ACCEPTED
01/31/2017
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 62719-695

(Base label):

GF-3335

HERBICIDE
with COLEX-D™ Technology

For control of annual and perennial weeds and use on Enlist™ corn, soybeans and cotton; use as a non-selective burndown; chemical fallow; and use as a preplant or preemergence or postemergence herbicide on listed crops, for control of emerged weeds only.

2,4-D products that do not contain COLEX-D™ Technology are not authorized for use in conjunction with Enlist corn, soybeans and cotton.

Do not allow contact of herbicide with foliage of desirable plants and trees because severe injury or destruction may result.

For approved states, see Uses Restrictions.

Group	4	HERBICIDE

Active Ingredient(s):
2,4-Dichlorophenoxyacetic acid,
choline salt 55.7%
Other Ingredients 44.3%
Total 100.0%

2,4-dichlorophenoxyacetic acid equivalent – 38% - 3.8 lb/gal

Keep Out of Reach of Children

WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Avoid contact with skin.

Do not get in eyes or on clothing.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, flaggers, and handlers must wear:
- Long-sleeved shirt and long pants
- Shoes and socks, plus
- Waterproof gloves
- Protective eyewear (goggles, faceshield, or safety glasses).

- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994, for emergency medical treatment information.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Physical and Chemical Hazards

Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic lined containers.

Do not mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel containers or spray tanks.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

(Storage and Disposal for rigid containers 5 gallons or less)

Storage and Disposal

Do not contaminate water, food, feed or seed by storage or disposal.
Pesticide Storage: Store in a cool, dry place. Store in original container. In case of leak or spill, contain material and dispose as waste.
Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
Container Handling: Nonrefillable container. Do not reuse or refill this container.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

(Storage and Disposal for refillable rigid containers larger than 5 gal)

Storage and Disposal

Do not contaminate water, food, feed or seed by storage or disposal.
Pesticide Storage: Store in a cool, dry place. Store in original container. In case of leak or spill, contain material and dispose as waste.
Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.
Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-AOL EPA Est. _____

Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

NET CONTENTS _____

(cover, shipping container):

GF-3335

HERBICIDE
with COLEX-D™ Technology

For control of annual and perennial weeds and use on Enlist™ corn, soybeans and cotton; use as a non-selective burndown; chemical fallow; and use as a preplant or preemergence or postemergence herbicide on listed crops, for control of emerged weeds only.

2,4-D products that do not contain COLEX-D™ Technology are not authorized for use in conjunction with Enlist corn, soybeans and cotton.

Do not allow contact of herbicide with foliage of desirable plants and trees because severe injury or destruction may result.

For approved states, see Uses Restrictions.

Group	4	HERBICIDE

Active Ingredient(s):
2,4-Dichlorophenoxyacetic acid,
choline salt 55.7%
Other Ingredients 44.3%
Total 100.0%

2,4-dichlorophenoxyacetic acid equivalent – 38% - 3.8 lb/gal

Keep Out of Reach of Children

WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Agricultural Use Requirements
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

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9330 Zionsville Road
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NET CONTENTS _____

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING

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Do not get in eyes or on clothing.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, flaggers, and handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks, plus
- Waterproof gloves
- Protective eyewear (goggles, faceshield, or safety glasses).
- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994, for emergency medical treatment information.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Physical and Chemical Hazards

Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic lined containers.

Do not mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel containers or spray tanks.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

TANK-MIXING INSTRUCTIONS:
GF-3335 may only be tank-mixed with products that have been tested and found not to adversely affect the spray drift properties of GF-3335. A list of those products may be found at GF-3335Tankmix.com.
DO NOT TANK-MIX ANY PRODUCT WITH GF-3335 unless:

1. You check the list of tested products found not to adversely affect the spray drift properties of GF-3335 at GF-3335Tankmix.com no more than 7 days before applying GF-3335; and
2. The product you tank-mix with GF-3335 is identified on that list of tested products.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear (goggles, faceshield, or safety glasses)

Storage and Disposal

Do not contaminate water, food, feed or seed by storage or disposal.
Pesticide Storage: Store in a cool, dry place. Store in original container. In case of leak or spill, contain material and dispose as waste.
Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:
Container Handling: Nonrefillable container. Do not reuse or refill this container.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers larger than 5 gallons:
Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.
Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Nonrefillable containers 5 gallons or larger:
Container Handling: Nonrefillable container. Do not reuse or refill this container.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Product Information

GF-3335 herbicide is a systemic herbicide that is intended for control of emerged annual and perennial broadleaf weeds. GF-3335 is designed to be applied to crops containing Enlist™ traits. These are patented genes that provide tolerance to GF-3335. Certain other uses are also permitted, as specified in this label. Corn, soybeans, and cotton or any other crop without the Enlist trait will be seriously damaged by foliar applications of GF-3335.

When this product is applied as directed and under the circumstances described, it controls annual and perennial broadleaf weeds listed in this label.

Time to Symptoms on Susceptible Plants: Initial symptoms include drooping leaves and epinasty, which typically occurs within 24 hours of foliar treatment. This is followed by chlorosis, necrosis, further leaf/stem malformation and, growth inhibition. Complete death and desiccation of susceptible plants occurs within 3-5 weeks.

Stage of Broadleaf Weeds: Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the annual and perennial rate tables for specific weeds. When treating weeds with disease or insect damage, weeds heavily covered with dust, or weeds under poor growing conditions, reduced weed control may result.

Rainfastness: Heavy rainfall soon after application may wash off this product from the foliage.

Spray Coverage: For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

Mode of Action: 2,4-D, the active ingredient in this product, mimics the naturally occurring plant auxins and overloads the plant's auxin balance affecting vital processes, such as cell division and elongation, resulting in abnormal growth and plant death.

Limited Soil Activity: Though some suppression of annual weeds emerging soon after application may occur when this product is applied at higher rates within the rate range, optimum control is achieved when the majority of weeds are emerged at the time of application. Unemerged plants arising from unattached underground rhizomes or rootstocks of perennials will not be affected by the herbicide and will continue to grow.

Biological Degradation: Degradation of this product is primarily a biological process carried out by soil microbes.

Herbicide Resistance Management

2,4-D, the active ingredient in this product, is a Group 4 herbicide (synthetic auxin). Some naturally occurring weed biotypes that are tolerant (resistant) to 2,4-D may exist due to genetic variability in a weed population. Where resistant biotypes exist, the repeated use of herbicides with the same modes of action can lead to the selection for resistant weeds. Certain agronomic practices delay or reduce the likelihood that resistant weed populations will develop and can be utilized to manage weed resistance once it occurs.

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is a best practice. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance.

The continued availability of this product depends on the successful management of the weed resistance program; therefore, it is very important to perform the following actions.

To aid in the prevention of developing weeds resistant to this product, the following steps should be followed:

- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.

- Apply full rates of GF-3335 in combination with another herbicide with a different mode of action and overlapping spectrum (See Tank Mix section). Choose the rate for the most difficult to control weed in the field at the specified time (correct weed size) to minimize weed escapes.
- Scout fields after application to detect weed escapes or shifts in weed species.
- Report any incidence of non-performance of this product against a particular weed species to your Dow AgroSciences retailer, representative or call 1-855-ENLIST-1(1-855-365-4781)
- If resistance is suspected, treat weed escapes with an herbicide having a mode of action other than Group 4 and/or use non-chemical methods to remove escapes, as practical, with the goal of preventing further seed production.

Additionally, users should follow as many of the following herbicide resistance management practices practical:

- Use a broad spectrum soil-applied herbicide with other modes of action as a foundation in a weed control program.
- Utilize sequential applications of herbicides with alternative modes of action.
- Rotate the use of this product with non-Group 4 herbicides.
- Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
- Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
- Avoid using more than two applications of GF-3335 and any other Group 4 herbicide within a single growing season unless in conjunction with another mode of action herbicide with overlapping spectrum.
- Manage weeds in and around fields, during and after harvest to reduce weed seed production.

Contact the local agricultural extension service, Dow AgroSciences representative, ag retailer or crop consultant for further guidance on weed control practices as needed.

Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (e.g., ground, aerial, and airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Do not aerially apply this product.

Nozzle Selection
The following chart details nozzles and pressure that are allowable for use when applying GF-3335 herbicide. Do not use any nozzle and pressure combination not specifically allowed in the chart.

Manufacturer	Model	Maximum-Operating Pressure (psi) 10 20 30 40 50 60 70 80 90 100 110
AlbuZ	AVI110025	MAX 60
	AVI11003	MAX 80
	AVI11004	MAX 90
	AVI11005	MAX 90
	AVI11006	MAX 90
GreenLeaf	TADF025-D	MAX 90
	TADF03-D	MAX 90
	TADF04-D	MAX 90
	TADF05-D	MAX 90
	TADF06-D	MAX 90
	TDXL11003	MAX 80
	TDXL11004	MAX 80
	TDXL11006	MAX 90
	TDXL11008	MAX 90
	TDXL-D11002	MAX 90
	TDXL-D110025	MAX 90
	TDXL-D11003	MAX 70
	TDXL-D11004	MAX 90
	TDXL-D11006	MAX 90
	TDXL-D11008	MAX 100
	TDXL-D025	MAX 80
Hypro	ULD12004	MAX 80
	ULD12005	MAX 70
	ULD12006	MAX 65
Lechler	ID11003	MAX 60
	ID11004	MAX 80
	ID11005	MAX 60
Teejet	AI11002	MAX 80
	AI110025	MAX 80
	AI11003	MAX 80
	AI11004	MAX 80
	AI11005	MAX 80
	AI11006	MAX 80
	AI11008	MAX 80
	AITTJ11004	MAX 50
	AITTJ11006	MAX 60
	AIXR11004	MAX 60
	AIXR11005	MAX 60
	AIXR11006	MAX 60
	TTI11002	MAX 80
	TTI110025	MAX 80
	TTI11003	MAX 80
	TTI11004	MAX 80
	TTI11005	MAX 80
	TTI11006	MAX 80
Wilger	MR11006	MAX 60
	MR11008	MAX 70
	MR11010	MAX 70

Groundboom Application
Use the minimum boom height based upon the nozzle manufacturer's directions. Spray drift potential increases as boom height increases. Spray drift can be minimized if nozzle height is not greater than the maximum height specified by the nozzle manufacturer for the nozzle selected.

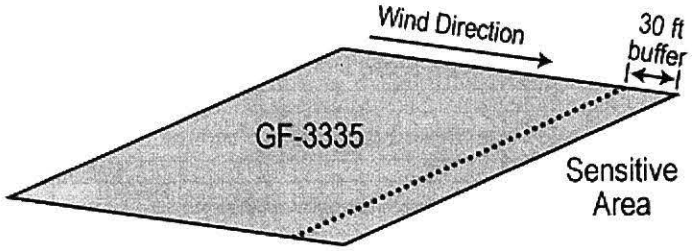
Wind Speed
Do not apply at wind speeds greater than 15 mph.

Temperature and Humidity
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Protection of Sensitive Areas –



You must maintain a 30 foot downwind buffer (in the direction in which the wind is blowing) from any area except:

1. Roads, paved or gravel surfaces.
2. Planted agricultural fields. (Except those crops listed in the "Susceptible Plants" section)
3. Agricultural fields that that have been prepared for planting.
4. Areas covered by the footprint of a building, shade house, green house, silo, feed crib, or other man made structure with walls and or roof.

To maintain the required downwind buffer zone:

- Measure wind direction prior to the start of any swath that is within 30 feet of a sensitive area.
- No application swath can be initiated in, or into an area that is within 30 feet of a sensitive area if the wind direction is towards the sensitive area.

State and Local Requirements
Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Do not allow contact of herbicide with foliage of desirable plants; including cotton and trees, because severe injury or destruction may result. Small amounts of spray drift that may not be visible may injure susceptible broadleaf plants. **Before making an application, please refer to your state's sensitive crop registry (if available) to identify any commercial specialty or certified organic crops that may be located nearby.**

At the time of application, the wind cannot be blowing toward adjacent commercially grown tomatoes and other fruiting vegetables (EPA crop group 8), cucurbits (EPA crop group 9), grapes and cotton.

Sprayer Clean-Out

To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.

1. Completely drain the spray system, including pump, lines and spray boom, for at least 5 minutes.
2. Fill the spray tank with clean water to at least 10% of the total tank volume and circulate the solution through the entire system so that all internal surfaces are contacted for at least 15 minutes to complete the first rinse of the application equipment. Spray the solution out of the spray tank through the boom.
3. Completely drain the spray system, including lines and spray boom, for at least 5 minutes; remove and clean filters and strainers.
4. During the second rinse, fill the container with clean water to at least 10% of the total tank volume. The addition of tank cleaning agents may be used at the manufacturer's recommended rates. Circulate the solution through the entire system for at least 15 to 20 minutes. Let the solution stand for several hours, preferably overnight. Spray the solution out of the spray tank through the boom.
5. Completely drain the spray system, including lines and spray boom, for at least 5 minutes.
6. Fill the container with clean water to at least 10% of the total tank volume and circulate the solution through the entire system so that all internal surfaces are contacted for at least 15 minutes to complete the third rinse of the application equipment. Spray the solution out of the spray tank through the boom.
7. Completely drain the spray system, remove nozzle tips and strainers and clean them separately.

Application Equipment and Application Methods

Chemigation: Do not apply this product through any type of irrigation system.

Aerial Application: Do not aerially apply this product.

Apply GF-3335 with the following application equipment: Apply spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes.

Ground Broadcast Spray

Boom, pull-type sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment. Use the minimum boom height based upon the nozzle manufacturer's specifications. Spray drift potential is increased as boom height increases. Spray drift can be minimized if nozzle height is not greater than maximum height recommended by nozzle manufacturer for the nozzle selected.

Use the specified rates of this product as a broadcast spray unless otherwise specified. As the density of weeds increases, increases spray volume within the specified range to ensure complete coverage. Check for even distribution of spray droplets.

Uses

Unless otherwise specified, applications may be made to control any weeds listed in the annual and perennial tables.

Precautions:

- The use directions are based upon a clean start at planting by using a burndown application or tillage to control existing weeds before crop emergence.
- In no-till and stale seedbed systems, a preplant burndown application of this product is recommended to control existing weeds prior to crop emergence.

Restrictions

- For any crop not listed in this section, do not apply less than 30 days prior to planting.

- For broadcast burndown or preplant treatments, do not harvest or feed treated vegetation for 8 weeks following application unless otherwise specified.
- Do not irrigate treated fields for at least 24 hours after application of GF-3335.
- Do not make application of GF-3335 if rain is expected in the next 24 hours.
- GF-3335 is approved for use in the following states: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia and Wisconsin. Do not use in any other state.
- Do not use GF-3335 in the following counties: Arizona (Yuma, Pinal, Maricopa, Pima, La Paz and Santa Cruz); Florida (Brevard, Broward, Charlotte, Collier, DeSoto, Glades, Hardee, Hendry, Highlands, Hillsborough, Indian River, Lee, Manatee, Martin, Miami-Dade, Okeechobee, Orange, Osceola, Palm Beach, Polk, Sarasota, and St. Lucie); Tennessee (Wilson).

Enlist Corn

These directions are for use on ENLIST Corn. Information on crop varieties containing these traits may be obtained from your seed supplier.

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for specific information on spray nozzles, spray pressure, speed, boom heights, etc., and other application information.

Preplant (Burndown) Through Preemergence
Make a single application of 1.5 to 2.0 pints of GF-3335 per acre. Use the upper end of the rate range for less susceptible weeds, more mature weeds, or weeds under stress. Apply any time before or after planting, but before corn emerges, to control weed seedlings or existing cover crops.

Postemergence
Apply 1.5 to 2.0 pints of GF-3335 per acre. Apply when weeds are small and corn is no larger than V8 growth stage or 30 inches (free standing) tall, whichever occurs first. For corn heights 30 to 48 inches (free standing), apply only using ground application equipment using drop nozzles aligned to avoid spraying into the whorl of corn plants. Make one to two applications with a minimum of 12 days between applications.

Precautions:
- Applying the high rates may result in temporary, cosmetic injury in the form of spotting or temporary plant leaning. This crop response will not affect long-term crop development or yield.

Restrictions:
- These use directions are only for field corn identified as containing the Enlist trait.
- **Preharvest Interval:** Do not apply within 30 days of forage harvest.
- Do not apply more than one preemergence application and no more than two postemergence applications per use season.
- Do not apply more than 6.0 pints of GF-3335 per acre per use season.
- Do not apply more than 2.0 pints of GF-3335 per acre per application.
- Do not apply GF-3335 as a preharvest application or as an application to corn later than the V8 stage of corn more than 48 inches (free standing).
- Do not aerially apply this product.

Corn

For use on corn that does not contain the Enlist trait.

Labeled Crops: Field corn, seed corn, sweet corn, popcorn

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not apply less than 10 gallons total spray volume per acre. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for specific information on spray nozzles, spray pressure, speed, boom heights, etc., for specific application information.

Preplant (Burndown) Through Preemergence
Make a single application of 1.5 to 2.0 pints of GF-3335 per acre. Use the upper end of the rate range for less susceptible weeds, more mature weeds, or weeds under stress. Apply any time before or after planting, but before corn emerges, to control weed seedlings or existing cover crops.

Precautions:
- For best results, do not apply to light sandy soils as a preplant or preemergence application.

Restrictions:
- Do not aerially apply this product.
- Do not apply more than 4.0 pints of GF-3335 per acre per use season.
- Do not apply more than 2.0 pints of GF-3335 per acre per application.

Fallow Systems to be Planted to Corn, Soybeans or Cotton

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for specific information on spray nozzles, spray pressure, speed, boom heights, etc., for specific application information.

Postharvest
Allow weeds to regrow after any damage incurred during harvest and recover from environmental stress before applying this product. Apply prior to heading of grass weeds and, if possible, before broadleaf weeds are more than 24 inches tall.

Chemical Fallow
This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Broadcast treatments will control or suppress many perennial weeds in fallow fields. Apply this product during the fallow period up until 7 to 14 days prior to planting corn without the Enlist trait, seed corn, sweet corn or popcorn, up until 30 days prior to planting soybean or cotton.

Preplant Fallow Beds
Apply this product to fallow beds prior to planting or emergence of any crop listed on this label. Apply this product during the fallow period up until 7 to 14 days prior to planting corn, seed corn, sweet corn or popcorn, and to 30 days prior to planting soybean or cotton.

Restrictions:
- Do not aerially apply this product.

ENLIST Soybean

These directions are for use on ENLIST Soybean. Information on crop varieties containing these traits may be obtained from your seed supplier.

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for

specific information on spray nozzles, spray pressure, speed, boom heights, etc., and other application information.

Preplant (Burndown) Through Preemergence
Make a single application of 1.5 to 2.0 pints of GF-3335 per acre. Use the upper end of the rate range for less susceptible weeds, more mature weeds, or weeds under stress. Apply any time before or after planting, but before soybean emerges, to control weed seedlings or existing cover crops.

Postemergence
Apply 1.5 to 2.0 pints of GF-3335 per acre. Apply when weeds are small and any time after soybean emergence but no later than R2 (full flowering stage). Make one to two applications with a minimum of 12 days between applications.

Restrictions:
- These use directions are only for soybean identified as containing the Enlist trait.
- **Preharvest Interval:** Do not apply within 30 days of harvest.
- Do not graze treated soybean.
- Do not harvest for forage or hay.
- Do not apply more than one preemergence application and no more than two postemergence applications per use season.
- Do not apply GF-3335 to Enlist soybeans later than the R2 stage.
- Do not apply more than 6.0 pints of GF-3335 per acre per use season.
- Do not apply more than 2.0 pints of GF-3335 per acre per application.
- Do not aerially apply this product.

Control of volunteer Enlist corn in Enlist soybean crops:

Sethoxydim or clethodim (Group 1 herbicides) may be used to control volunteer Enlist corn in Enlist soybean crops. The user is advised to rotate mechanisms of action in subsequent crops to avoid development of weed resistance to this herbicide group.

Soybean

For use on soybean that does not contain the Enlist trait.

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for specific information on spray nozzles, spray pressure, speed, boom heights, etc., for specific application information.

Preplant (Burndown)
Apply up to 1.0 pints of GF-3335 per acre no less than 15 days prior to planting soybeans, and apply up to 2.0 pints per acre, not less than 30 days prior to planting soybeans. See Precautions and Restrictions in this section.

Precautions:
- **Note:** Unacceptable injury to soybeans planted in treated fields may occur. Whether soybean injury occurs and the extent of such injury depends upon weather (temperature and rainfall) from herbicide application until soybean emergence, and agronomic factors, such as the amount of weed vegetation and previous crop residue present at the time of application. Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present.
- Do not disturb treated soil through tillage between application and planting of soybeans.
- Do not apply GF-3335 as a preplant application in soybeans unless soybean injury is acceptable, including possible stand loss and/or yield reductions.

Restrictions:
- Do not use on sandy soils with less than 1% organic matter.
- In treated fields, plant soybean seed as deep as practical, but not less than 1 inch deep. Adjust the planter, if necessary, to ensure that planted seed is adequately covered.
- Do not make more than one application per season regardless of the amount of product applied.
- During the growing season following application, do not replant treated fields with crops other than those labeled for use with 2,4-D.
- Do not apply more than a total of 2.0 pints of GF-3335 per acre per use season.
- Do not aerially apply this product.

Enlist Cotton

These directions are for use on Enlist Cotton. Information on crop varieties containing these traits may be obtained from your seed supplier.

Carriers and Spray Volumes
Apply in a broadcast spray volume of water ranging from 10 to 15 gallons per acre for best results. Do not substitute water with nitrogen solutions as carrier. See the Spray Drift Management section for specific information on spray nozzles, spray pressure, speed, boom heights, etc., and other application information.

Preplant (Burndown) Through Preemergence
Make a single application of 1.5 to 2.0 pints of GF-3335 per acre. Use the upper end of the rate range for less susceptible weeds, more mature weeds, or weeds under stress. Refer to Annual and Perennial Weeds sections for specific weed height and use rate information. Apply any time after planting, but before cotton emerges, to control weed seedlings or existing cover crops.

Postemergence
Apply 1.5 to 2.0 pints of GF-3335 per acre. Apply when weeds are small and any time after cotton emergence but no later than full flowering (mid-bloom stage). Refer to Annual and Perennial Weeds sections for specific weed height and use rate information. Make one to two postemergence applications with a minimum of 12 days between applications.

Precautions and Restrictions:
- These use directions are only for cotton identified as containing the Enlist trait.
- **Preharvest Interval:** Do not apply within 30 days of harvest.
- Do not graze treated cotton.
- Do not harvest for forage or hay.
- Do not apply more than one preemergence application and no more than two postemergence applications per use season.
- Do not apply GF-3335 to cotton later than the mid-bloom stage.
- Do not apply more than 6.0 pints of GF-3335 per acre per use season.
- Do not apply more than 2.0 pints of GF-3335 per acre per application
- Do not aerially apply this product.

Weed Control

Apply 1.5 pints of this product per acre to actively growing weeds once the majority reaches 3-6 inches in height. Apply 2.0 pint rate when weeds are larger than 6 inches tall, when applications are made under challenging environmental conditions. This product may be used up to 2.0 pints per acre where heavy densities exist. Water carrier volumes of 10 to 15 gallons per acre are recommended for best results. Best control will be achieved when this product is applied in combination with another broad spectrum herbicide having a different mode of action (see Tank Mix Section).

Hard to control weeds, such as Palmer amaranth, may require a total program approach including soil applied residual herbicide(s) followed by a single or sequential post herbicide application.

Perennial weeds may require higher rates for best control. Below-ground portions of perennial weeds may not be completely controlled with single applications and follow-up applications may be required if regrowth occurs.

Controlled Weeds Table:

Annual Weeds:

anoda, spurred	fleabane, hairy (*Conyza bonariensis*)[1]	ragweed, common
bittercress	fleabane, rough[1]	ragweed, giant
bitterweed	geranium, Carolina	Russian thistle
broomweed, common	groundcherryhemp sesbania	salsify, common
burdock	horseweed/marestail (*Conyza canadensis*)[1]	salsify, western
buttercup	jewelweed	shepherd's-purse
carpetweed	jimsonweed	sicklepod
cinquefoil, common	lambsquarters	smartweed, ladysthumb
cinquefoil, rough	London rocket	smartweed, Pennsylvania
cocklebur	mallow, venice	sowthistle, annual
copperleaf, hophornbeam	morningglory (*Ipomoea* spp.)	Spanishneedles
copperleaf, Virginia	mustard, tansy	sunflower
croton, Texas	mustard, tumble	sweetclover
croton, woolly	mustard, wild	teaweed/prickly sida thistle, bull
dayflower, Benghal	nightshade, black	thistle, musk
devilsclaw (unicorn plant)	nightshade, hairy	velvetleaf
dwarfdandelion	pepperweed	vervain
eclipta	pusley, Florida	vetch
eveningprimrose, common	pigweed, redroot	waterhemp
falsedandelion	pigweed, Palmer[1]	
falseflax, smallseed	pigweed, smooth	
fiddleneckfield pennycress	prickly lettuce	
filareefleabane, annual	puncturevine	
	purslane	
	radish, wild	

[1]Hard to control weeds, such as Palmer amaranth, may require a total program approach including soil-applied residual herbicide(s) followed by a single or sequential post herbicide application.

Perennial Weeds:

alfalfa	dock	pokeweed, common
artichoke, Jerusalem	dogbane	pennywort
aster, many flowered	garlic, wild	plantains
bindweed, field	hawkweed, orange	ragwort, tansy
bindweed, hedge	healall	sowthistle, perennial
blueweed, Texas	ironweed	thistle, Canada
catnip	ivy, ground	waterplantain
chicory	loco, bigbend	wormwood
cress, hoary	nettles	
dandelion	onion, wild	

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent permitted by law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

EPA accepted)__/__/__

Please read instructions on reverse before completing form. Form Approved, OMB No. 2070-0060 Print Form

EPA United States Environmental Protection Agency Washington, DC 20460

[X] Registration [ ] Amendment [ ] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
Dow AgroSciences/62719-XXX	Kathryn Montague	[X] None [ ] Restricted
4. Company/Product (Name)	**PM#**	
Dow AgroSciences/GF-3335	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

[ ] *Check if this is a new address*

6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[ ] Notification - Explain below.
[ ] Final printed labels in response to Agency letter dated _____
[ ] "Me Too" Application.
[X] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Dow AgroSciences is respectfully submitting an application for new registration of GF-3335, which is an end-use herbicide product for control of annual and perennial weeds on Enlist corn and Enlist soybeans.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes* [ ] No	[ ] Yes [ ] No	[ ] Yes [ ] No	[ ] Metal [ ] Plastic [ ] Glass [ ] Paper [ ] Other (Specify) _____
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[ ] Label [ ] Container		[ ] On Label [ ] On Labeling accompanying product

6. Manner in Which Label is Affixed to Product: [ ] Lithograph [ ] Paper glued [ ] Stenciled [ ] Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Diego Fonseca	Regulatory Leader	(317)337-4693

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title	
Fonseca	Regulatory Leader	
4. Typed Name	**5. Date**	
Diego Fonseca (dfonseca@dow.com)	May 19, 2015 e-Submission	

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy

Dow AgroSciences
9330 Zionsville Road Indianapolis, IN 46268

www.dowagro.com

308/2E
May 19, 2015

Document Processing Desk (**APPL**) (**ESUB**) (**REGFEE**)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attention: Kathryn Montague/PM-23 (7505P)

GF-3335 (AI: 2,4-D)
EPA REGISTRATION NUMBER: 62719-XXX
APPLICATION FOR NEW REGISTRATION – SECTION 3

Dow AgroSciences is respectfully submitting an application for new registration of GF-3335, which is an end-use herbicide product for control of annual and perennial weeds on Enlist corn and Enlist soybeans. This submission includes data to qualify spray nozzles, which requires review in science division. We believe this application for registration is PRIA action R320. A complimentary copy of the Pay.Gov.Payment Confirmation has been included (Pay.gov Tracking ID: 25LBCK9T; Agency Tracking ID: 74804829770)

Dow AgroSciences is submitting this submission electronically (e-PRISM.xml New Section 3 for **GF-3335**).

- CD containing e-PRISM.xml – Data Submission as follows:
  - Transmittal document (this letter)
  - Application for Pesticide, EPA Form 8570-1
  - EPA Form 8570-35, Data Matrix – Agency Copy (13 Pages)
  - EPA Form 8570-35, Data Matrix – Public File Copy (13 Pages)
  - Confidential Statement of Formula entitled GF-3335 dated January 8, 2015 (2 pages)
  - Label entitled GF-3335 (K1A / GF-3335 / Prop Sec 3 / 05-18-15) (20 pages)

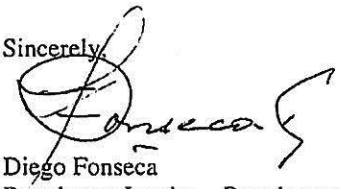
e-Submission

Volume Guideline No.	MRID NO.	Study
Volume #2 830.1500, 830.1600, 830.1650, 830.1670, 830.1750, 830.1800	49633301	Title: Group A-Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Formulation Process, Discussion of Formation of Impurities, Certified Limits, and Enforcement Analytical Method for GF-3335, an End Use Product Containing 2,4-D Choline Salt Author: Holger Tank Report Date: December 8, 2014 Study ID: NAFST-14-355 Pages: 1-41 incl. confidential attachment pg 1-59 (1 pdf copy)
Volume #3 870.1100	49633302	Title: Acute Oral Toxicity Study of GF-3335 in Rats Author: Manish R. Patel Report Date: July 11, 2014 Study ID: 140690 Pages: 1-39 (1 pdf copy)
Volume #4 870.1200	49633303	Title: Acute Dermal Toxicity Study of GF-3335 in Rats Author: Manish R. Patel Report Date: July 12, 2014 Study ID: 140691 Pages: 1-36 (1 pdf copy)
Volume #5 870.1300	49633304	Title: Acute Inhalation Toxicity Study of GF-3335 in Rats Author: Ramesh Verma Report Date: July 17, 2014 Study ID: 140695 Pages: 1-62 (1 pdf copy)

Volume #6 870.2400	49633305	Title: Acute Eye Irritation Study of GF-3335 in Rabbits Author: Manish R. Patel Report Date: July 12, 2014 Study ID: 140693 Pages: 1-42 (1 pdf copy)
Volume #7 870.2500	49633306	Title: Acute Dermal Irritation Study of GF-3335 in Rabbits Author: Manish R. Patel Report Date: July 12, 2014 Study ID: 140692 Pages: 1-34 (1 pdf copy)
Volume #8 870.2600	49633307	Title: Skin Sensitisation Study of GF-3335 by Local Lymph Node Assay in Mice Author: Manish R. Patel Report Date: August 14, 2014 Study ID: 140694 Pages: 1-58 (1 pdf copy)
Volume #9 N/A	49633308	Title: Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335 Author: J.J. Schleier III, et. al. Report Date: May 13, 2015 Study ID: 150810 Pages: 1-1145 (1 pdf copy)

Your EPA PRIA confirmation can be sent to PRIAtrack@dow.com. If you require additional information, please contact , Regulatory Specialist at 317-337-4655 (rrbrown2@dow.com), or Kerri Hipsky, Registration Assistant for this product, at 317-337-7827 (kahipsky@dow.com).

Sincerely,



Diego Fonseca
Regulatory Leader – Regulatory Affairs
317-337-4693
317-337-4649 (FAX)
dfonseca@dow.com

Enclosures

DF/kh

resubmission

Enlist Actions - Bundling Proposal

Fonseca, Diego (D) <dfonseca@dow.com>

Thu 3/31/2016 10:02 AM

To:Montague, Kathryn V. <Montague.Kathryn@epa.gov>;

Cc:Schmid, Emily <Schmid.Emily@epa.gov>;

2 attachments (3 MB)

GF-3335-AOL 31Mar16d.docx; GF-3335-AOL 31Mar16dW-Ed.docx;

Dear Kay.

During our last meeting March 22nd, it was discussed the possibility of bundling all actions on Enlist herbicides currently under EPA's review, within only one period for public comments. These actions are:

- Enlist Duo (62719-649):
  - Additional 18 states (AL, CO, DE, FL, GA, KY, MD, MI, NC, NJ, NM, NY, PA, SC, TN, TX, VA, & WV);
  - Additional use on Enlist cotton (New food use). Includes Tolerance Petition for 2,4-D in Cotton.

- GF-3335 (62719-AOL); Application for New Registration.
  Originally this action only included corn and soybean crops in label. Attached, you will be able to see a new GF-3335 label version added with Enlist cotton use. If agreed, this new label version of GF-3335 would replace previous one dated 18-May-2015. This new label version proposal seeks harmonization of crop uses across Enlist herbicides in preparation for a potential bundling of these actions within one period for public comments.

We are in good timing to discuss further on this potential path, so please feel free to contact me as you deem appropriate.
Sincerely,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

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resubmission,

Schmid, Emily

From: Fonseca, Diego (D) <dfonseca@dow.com>
Sent: Wednesday, January 04, 2017 3:23 PM
To: Schmid, Emily
Subject: RE: 62719-AOL GF-3335 Label
Attachments: GF-3335-AOL 04Jan17d.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Emily, Happy New Year!

As promised, please find attached the updated label version of GF-3335 dated 04-Jan-2017 that matches for cross consistency label of Enlist Duo currently under review.
This GF-3335 label version includes a "Nozzles Selection" chart on pages 10 and 11, same as Enlist Duo. Moving this chart to the respective (future) product website, similar to 'tank mixes", is an option for DAS. It would simplify labeling administration, so let's discuss further about it. I'll appreciate confirming receipt of this e-mail.

Changing subject, I wonder if you can provide to me with the current status of Enlist Duo (62719-649). Back in Dec 15th, the Agency was working on responding comments posted in Docket.

Best regards,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

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From: Schmid, Emily [mailto:Schmid.Emily@epa.gov]
Sent: Tuesday, December 20, 2016 7:06 AM
To: Fonseca, Diego (D)
Subject: RE: 62719-AOL GF-3335 Label

Thanks Diego. I'll watch for it then.

From: Fonseca, Diego (D) [mailto:dfonseca@dow.com]
Sent: Monday, December 19, 2016 2:02 PM

To: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: 62719-AOL GF-3335 Label

Hi Emily. See attached the latest label version for GF-3335 that I sent to you back in March 31st 2016. As an action agreed from last phone call (Dec 15th), I'll sent to you first week of January, a newer label version updated with label terms to be implemented as on Enlist Duo label. Please let me know if my proposal fits well for your plans. Thanks,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

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resubmission 1

Schmid, Emily

From: Fonseca, Diego (D) <dfonseca@dow.com>
Sent: Thursday, January 26, 2017 2:25 PM
To: Schmid, Emily
Cc: Brown, Ronda (RR)
Subject: RE: 62719-AOL GF-3335 Label
Attachments: GF-3335-AOL 26Jan17d.pdf

Hi Emily. Please see attached fully updated label version as per requested. Copy with edits is available upon request. Thanks,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

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From: Schmid, Emily [mailto:Schmid.Emily@epa.gov]
Sent: Thursday, January 26, 2017 8:26 AM
To: Fonseca, Diego (D)
Subject: RE: 62719-AOL GF-3335 Label

Hi Diego,

I hope you are doing well.

I have attached the Enlist Solo label with our comments.

Let me know if you have any questions.

Best regards,
Emily

From: Fonseca, Diego (D) [mailto:dfonseca@dow.com]
Sent: Wednesday, January 04, 2017 3:23 PM
To: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: RE: 62719-AOL GF-3335 Label

Hi Emily, Happy New Year!

As promised, please find attached the updated label version of GF-3335 dated 04-Jan-2017 that matches for cross consistency label of Enlist Duo currently under review.

This GF-3335 label version includes a "Nozzles Selection" chart on pages 10 and 11, same as Enlist Duo. Moving this chart to the respective (future) product website, similar to 'tank mixes", is an option for DAS. It would simplify labeling administration, so let's discuss further about it. I'll appreciate confirming receipt of this e-mail.

Changing subject, I wonder if you can provide to me with the current status of Enlist Duo (62719-649). Back in Dec 15th, the Agency was working on responding comments posted in Docket.

Best regards,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

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9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

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From: Schmid, Emily [mailto:Schmid.Emily@epa.gov]
Sent: Tuesday, December 20, 2016 7:06 AM
To: Fonseca, Diego (D)
Subject: RE: 62719-AOL GF-3335 Label

Thanks Diego. I'll watch for it then.

From: Fonseca, Diego (D) [mailto:dfonseca@dow.com]
Sent: Monday, December 19, 2016 2:02 PM
To: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: 62719-AOL GF-3335 Label

Hi Emily. See attached the latest label version for GF-3335 that I sent to you back in March 31st 2016. As an action agreed from last phone call (Dec 15th), I'll sent to you first week of January, a newer label version updated with label terms to be implemented as on Enlist Duo label. Please let me know if my proposal fits well for your plans. Thanks,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

resubmission

Schmid, Emily

From: Montague, Kathryn V.
Sent: Wednesday, February 01, 2017 8:23 AM
To: Schmid, Emily
Subject: FW: GF-3335 "Enlist Solo" - label change needed
Attachments: GF-3335-AOL 31Jan17d.pdf

Here is Diego's resubmission.

From: Fonseca, Diego (D) [mailto:dfonseca@dow.com]
Sent: Tuesday, January 31, 2017 8:58 AM
To: Montague, Kathryn V. <Montague.Kathryn@epa.gov>
Subject: RE: GF-3335 "Enlist Solo" - label change needed

Hi Kay. No problem, see attached the GF-3335 label changed as per you requested, to read "GF-3335Tankmix.com" on page 8. For your information, our plan later this year is changing current product name "GF-3335" with the final brand name. For questions, please do not hesitate to contact me. Thanks,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

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9330 Zionsville Road, Indianapolis, IN 46268

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From: Montague, Kathryn V. [mailto:Montague.Kathryn@epa.gov]
Sent: Monday, January 30, 2017 5:05 PM
To: Fonseca, Diego (D)
Cc: Houtman, Bruce (BA); Schmid, Emily
Subject: GF-3335 "Enlist Solo" - label change needed

Hi, Diego,

Bruce and I just spoke, and, per our discussion, the label needs editing in 2 places with the name of the actual website that will be set up for the Enlist solo product. Assume this will be "GF3335tankmix.com". I have made that edit as comments in the attached label; if you are going with a different website name, feel free to revise appropriately. Otherwise, you can "accept change" and return the revised label to me. Once that is done, I should be able to stamp it.

Best Regards,
Kay

Form Approved OMB Nos. 2070-0060; 2070-0057; 2070-0107; 2070-0122; 2070-0164

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
1200 Pennsylvania Avenue, N.W.
WASHINGTON, D.C. 20460

Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number Dow AgroSciences LLC, 9330 Zionsville Road, Indianapolis, IN 46268;	EPA Registration Number/File Symbol 62719-XXX
Active Ingredient(s) and/or representative test compound(s) 2,4-D	Date June 3, 2015
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Terrestrial food crop use	Product Name GF-3335

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

☐ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	☑ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☐ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses .

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature	Date	Typed or Printed Name and Title
Fonseca	June 3, 2015	Diego Fonseca, Regulatory Leader

EPA Form 8570-34 (12-2003) Electronic and Paper versions available. Submit only Paper version.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

FEE

CONTAINS CONFIDENTIAL BUSINESS INFORMATION

DP BARCODE No.: 428392 FILE SYMBOL NO.: 62719-AOL DECISION No.: 505414
PC CODE: 051505 COMPANY NAME: Dow AgroSciences LLC
FOOD USE: Yes ACTION CODE: R 320 PRODUCT NAME: GF-3335

DATE OUT: May 3, 2016

SUBJECT: End-Use Product Chemistry Review
Product Name: GF-3335

FROM: Bruce F. Kitchens, Chemist
Product Chemistry Team
Chemistry, Inerts and Toxicology Assessment Branch/RD (7505P)

Bruce F. Kitchens
03 May 2016

TO: RM 23, Kathryn V. Montague/Emily Schmid
Herbicide Branch/RD (7505P)

S Bm 5/5/16

INTRODUCTION:

The registrant, Dow AgroSciences LLC, is submitting an application to register the proposed end-use product, GF-3335. The active ingredient in this product is 2,4-D choline salt (65.3% pai) at a label nominal concentration of 55.7% a.i. This product is intended for use as an herbicide end-use product. In support of this request, the registrant is submitting a proposed basic Confidential Statement of Formula (CSF) dated 08 Jan 2015; a draft label and product chemistry data contained in MRID#s 496333-01 and 497022-01. The Chemistry, Inerts and Toxicology Assessment Branch (CITAB) has been asked to review this submission.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient: 2,4-D choline salt (55.70% ai)

2. Has the registrant claimed substantial similarity to a registered product?

[ ] Yes; [X] No; [ ] NA; if yes give the registration number of the cited product.

3. All of the source materials of the active ingredient are derived from registered sources- [X] Yes [ ] No

4. All inert ingredients have been screened by IIAB and are approved for the proposed labeled uses.

5. Confidential Statement of Formula:

[X] Basic - Dated: 08 Jan 2015 Resubmitted Dated:
[ ] Alternate – Dated: Resubmitted Dated:

Alternate CSF complies with 40 CFR 152.43
[ ] Yes [ ] No [X] NA

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF concurs with product label (PR Notice 91-2).
[X] Yes, if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs other ingredient)
[X] Yes; [ ] No; if not, explain below

Metallic equivalent:	[ ] Yes [X] NA
Soluble arsenic:	[ ] Yes [X] NA
Isomeric ratios:	[ ] Yes [X] NA
Acid Equivalent:	[ ] Yes [X] NA

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%:	[ ] Yes; [ ] No; [X] NA
Methanol at > 4%:	[ ] Yes; [ ] No; [X] NA
Sodium nitrate/sodium nitrite	[ ] Yes; [ ] No; [X] NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for flammability, explosive potential or electric insulator breakdown?
[X] Yes ([ ] No) spoke to Shyam on 1-4-7

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?
[ ] Yes; [ ] No; [X] NA; if not, explain below

d. Label requires an additional Storage and Disposal statement: [ ] Yes [X] No; if yes explain below

7. Group **A**: Product Chemistry Data

CITAB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	**Study Title**		**Data submitted**		**CITAB's Assessment of Data**	**MRID Nos.**
			Yes	**No**		
830.1550	Product Identity & Composition		X		A	496333-01
830.1600	Description of materials used to produce the product		X		A	496333-01
830.1650	Description of formulation process		X		A	496333-01
830.1670	Discussion on the formation of impurities		X		A	496333-01
830.1700	Preliminary analysis			X	NA	
830.1750	Certified limits (158.350)	Standard certified limits	X		A	496333-01
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method		X		A	496333-01

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8. Group **B:**

Guideline No.	Study Title	Value or Qualitative Description	CITAB's Assessment of Data	MRID Nos.
830.6303	Physical State	Product is a green to brown liquid with a characteristic odor.	A	497022-01
830.6314	Oxidation/ Reduction	Product was stable when mixed with potassium permanganate, monoammonium phosphate, Zn (dust) and water.	A	497022-01
830.6315	Flammability	➢ 100°C	A	497022-01
830.6316	Explodability	Product does not possess impact or thermal sensitivities and is not considered explosive.	A	497022-01
830.6317	Storage stability	Study in progress	I	
830.6320	Corrosion Characteristics	Study in progress	I	
830.7000	pH	5.27 @ 23°C (1% w/w dilution D.I. water)	A	497022-01
830.7100	Viscosity	63.3 mPa·s @ 20.0°C 23.6 mPa·s @ 40°C	A	497022-01
830.7300	Density (units)	1.1934 g/ml	A	497022-01

A = Acceptable, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable.

CONCLUSIONS:

CITAB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

A. Substantial similarity to the cited product (Reg. No. .....) from Product chemistry view point
[ ] Similar
[ ] Not similar, give reasons
[ ] Identical
[ ] Not identical
[X] Not applicable

B. Confidential Statement of formula

1. Basic CSF (dated 08 Jan 2015)
[X] Acceptable
[ ] Not Acceptable
[ ] Not Applicable

If not acceptable provide the reasons

2. Alternate CSF
[ ] Acceptable
[ ] Not Acceptable
[X] Not Applicable

If not acceptable give reasons

C. Group A Product Chemistry Data
[X] Acceptable
[ ] Not acceptable
[ ] Acceptable with the exception of Guideline(s): (provide the guideline number & explain)
[ ] Not required
[ ] Data cited

D. Group B Product chemistry data
[ ] Acceptable
[ ] Not acceptable
[X] Acceptable with the exception of Guidelines: (830.6317 & 830.6320)
[ ] Not required
[ ] Data cited

Storage stability and corrosion characteristics studies are in progress.

E. Product Label/Draft Label

Recommendations – Yes [ ]; No [X]

If yes, give recommendations below:

Note: Please add additional remarks if necessary for each section

Pages 63-64*Confidential Statement of Formula may be entitled to confidential treatment*

Screen

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
OFFICE OF PESTICIDE PROGRAMS REGISTRATION DIVISION (7505P)

DP BARCODE No.: D428392; **FILE SYMBOL No.**: 62719-AOL (screen); **PRODUCT NAME**: GF-3335; **DECISION No.**: 505414; **PC Code(s)**: 051505; **ACTION CODE**: R320; **FOOD Use**: Yes

DATE OUT: August 7, 2015

SUBJECT: Completeness check screening for end use product "GF-3335"

FROM: Shyam Mathur,
Product Chemistry Team Leader
CITAB / RD (7505P)

SMathur 8/7/15

TO: Emily Schmid / Kathryn Montague, RM 23
Herbicide Branch / RD (7505P)

Company Name: Dow Agro sciences, LLC
Formulation Type: Herbicide
Active Ingredient(s): Chloine salt of 2, 4-D (55.7%)
MRID Nos: 49633301

CONCLUSION:

Deficiencies: Yes
(if there are deficiencies they are indicated below each heading as Note 1, Note 2 Etc).

Group A: All required data submitted

Group B: No data submitted
Note 1: No data was submitted for the group B corresponding to Physical-chemical characteristics of the proposed product. The registrant must submit 830 series group B product chemistry data for the proposed product to support the registration of the product.

gr. B data submitted w/r MRID # 497022-01 9/1/15 SMathur

CSF: Basic CSF (dated 01-08-2015) submitted

Note to PM: If the deficiencies are found in the screen results, please inform the registrant and bring back to author of this report the corrected deficiencies in response to 10 day letter, so that it can be attached to the original bean, if the data package is still in CITAB. New Bean is required in case the bean has been closed by CITAB. Thank you.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 19, 2015

Diego Fonseca
Regulatory Leader
Dow AgroSciences
9330 Zionsville Road
Indianapolis, IN 46268

Subject: Preliminary Technical Screening Deficiency
Product Name: GF-3335
EPA File Symbol: 62719-AOL
Application Date: May 19, 2015
Decision Number: 505414

Dear Mr. Fonseca:

The Agency has completed its preliminary technical screening of your application pursuant to Section 33(f)(4)(B)(i)(II) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended by the Pesticide Registration Improvement Extension Act. The Agency has determined that your application has not passed the preliminary technical screen and therefore is subject to rejection if the application is not corrected.

Specifically, no data was submitted for the group B corresponding to physical-chemical characteristics of the proposed product. The data you cited on your data matrix in support of Group B is not adequate, as it is for a technical product. Group B (830 series) product chemistry data for the proposed product must be submitted, or appropriate Group B data cited, in order to support registration.

In order for the review of your product to continue, you will need to correct your application to address the item(s) listed above within ten business days of the date you received this letter. Corrections must be received by EPA by the 10th business day. EPA recommends sending your complete set of corrections by email to the contact listed below to ensure they are timely received. If studies or confidential information are being submitted by mail, a complete courtesy copy received by email by the deadline will be considered timely. If you do not correct the application or do not respond within ten business days, your application will be rejected.

At this time you could also choose to withdraw your application. If you have any questions, please contact Emily Schmid at (703) 347-0189 or at schmid.emily@epa.gov.

Sincerely,

Susan T. Lewis

Susan Lewis, Director
Registration Division (7505P)
Office of Pesticide Programs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
OFFICE OF PESTICIDE PROGRAMS REGISTRATION DIVISION (7505P)

DP BARCODE No.: D428392; **FILE SYMBOL No.**: 62719-AOL (screen); **PRODUCT NAME**: GF-3335; **DECISION No.**: 505414; **PC Code(s)**: 051505; **ACTION CODE**: R320; **FOOD Use**: Yes

DATE OUT: August 12, 2015

SUBJECT: Completeness check screening for end use product "GF-3335"

FROM: Shyam Mathur,
Product Chemistry Team Leader
CITAB / RD (7505P)

SBm 8/12/15

TO: Emily Schmid / Kathryn Montague, RM 23
Herbicide Branch / RD (7505P)

Company Name: Dow Agro sciences, LLC
Formulation Type: Herbicide
Active Ingredient(s): Chloine salt of 2, 4-D (55.7%)
MRID Nos: 49633301

CONCLUSION:

Deficiencies: Yes
(if there are deficiencies they are indicated below each heading as Note 1, Note 2 Etc).

Group A: All required data submitted

Group B: No data submitted
Note 1: The registrant has cited the group B (Physical-chemical characteristics) data for the technical 2, 4-D acid product and no data was submitted for the proposed end used product. The registrant must submit 830 series group B product chemistry data for the proposed product to support the registration of the product.

CSF: Basic CSF (dated 01-08-2015) submitted

Note to PM: If the deficiencies are found in the screen results, please inform the registrant and bring back to author of this report the corrected deficiencies in response to 10 day letter, so that it can be attached to the original bean, if the data package is still in CITAB. New Bean is required in case the bean has been closed by CITAB. Thank you.

RE: Deficiency (EPA File Symbol 62719-AOL)

Fonseca, Diego (D) <dfonseca@dow.com>

Thu 9/3/2015 10:07 AM

To:Schmid, Emily <Schmid.Emily@epa.gov>;

Cc:Montague, Kathryn V. <Montague.Kathryn@epa.gov>;

Hi Emily. This e-mail to inform that dated 28-August, as per requested below, the Group B report was mailed to EPA's Front End.
Best regards,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

DOW **Dow AgroSciences** | *Solutions for the Growing World*

From: Schmid, Emily [mailto:Schmid.Emily@epa.gov]
Sent: Wednesday, August 19, 2015 11:53 AM
To: Fonseca, Diego (D)
Cc: Montague, Kathryn V.
Subject: Deficiency (EPA File Symbol 62719-AOL)

Hi Diego,

A deficiency was found (group B product chemistry data) during the technical screen of the new product you submitted, GF-3335 (EPA File Symbol 62719-AOL). I have attached the related Agency letter and screening memo.

Please let me know if you have any questions.

Thank you,

Emily Schmid
Biologist

U.S. Environmental Protection Agency
Registration Division
Herbicide Branch

Dow AgroSciences

Dow AgroSciences LLC
9330 Zionsville Road Indianapolis, IN 46268 USA

www.dowagro.com

308/2E
August 27, 2015

Document Processing Desk (ESUB) (DATA)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attention: Kathryn Montague/PM-23 (7505P)

GF-3335 (AI: 2,4-D)
EPA REGISTRATION NUMBER: 62719-AOL
DATA SUBMISSION

In response to EPA's letter received 19-August-2015 (enclosed for your reference), Dow AgroSciences is respectfully submitting the Group B report, corresponding to physical-chemical characteristics of GF-3335 (EPA File Symbol 62719-AOL).

Dow AgroSciences is submitting this submission electronically (e-PRISM.xml New Section 3 for GF-3335).

- CD containing e-PRISM.xml – Data Submission as follows:
  - Transmittal document (this letter)
  - Application for Pesticide, EPA Form 8570-1
  - EPA Form 8570-35, Data Matrix – Agency Copy (12 Pages)
  - EPA Form 8570-35, Data Matrix – Public Copy (12 Pages)
  - EPA Correspondence dated August 19, 2015

Volume Guideline No.	MRID NO.	Study
Volume #2 830.6302, 830.6303, 830.6304, 830.6314, 830.6315, 830.6316, 830.7000, 830.7100, 830.7300	49702201	Title: Determination of Color, Odor, Physical State, Oxidizing and Reducing Action, Flammability, Explodability, pH, Viscosity, and Density of GF-3335, an End Use Product Containing 2,4-D Choline Salt Author: Strickland, Tiffany Report Date: May 6, 2014 Study ID: FAPC-G-14-23 Pages: 1-18 (1 pdf copy)

Your EPA PRIA confirmation can be sent to PRIAtrack@dow.com. If you require additional information, please contact , Regulatory Specialist at 317-337-4655 (rrbrown2@dow.com), or Kerri Hipsky, Registration Assistant for this product, at 317-337-7827 (kahipsky@dow.com).

Sincerely,

Diego Fonseca
Regulatory Leader – Regulatory Affairs
317-337-4693
317-337-4649 (FAX)
dfonseca@dow.com

Enclosures

DF/kh

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
	GF-3335 (62719-AOL)				
830.6302	Color	49702201	62719	OWN	
830.6303	Physical State	48289802	62719	OWN	
830.6304	Odor	48289802	62719	OWN	
830.6314	Oxidation/Reduction: Chemical Incompatability	48289802	62719	OWN	
830.6315	Flammability	48289802	62719	OWN	
830.6316	Explodability	48289802	62719	OWN	
830.7000	pH	48289802	62719	OWN	
830.7100	Viscosity	48289802	62719	OWN	
830.7300	Density/Relative Density/Bulk Density	48289802	62719	OWN	
	2,4-D Technical (62719-24, 62719-25) / Generic				
830.1550	Product Identity and composition	41055801	62719	OWN	
830.1550	Product Identity and composition	41055802	62719	OWN	
830.1550	Product Identity and composition	41055804	62719	OLD	
830.1550	Product Identity and composition	41055805	62719	OLD	
830.1600	Description of materials used to produce the product	41055801	62719	OWN	
830.1600	Description of materials used to produce the product	41055804	62719	OLD	
830.1620	Description of production process	41055801	62719	OWN	
830.1650	Description of formulation process	N/A FOR TECH			
830.1670	Description of formation of impurities	41055801	62719	OWN	
830.1670	Description of formation of impurities	41973501	62719	OLD	
830.1700	Preliminary analysis	41055805	62719	OLD	
830.1700	Preliminary analysis	43777502	62719	OWN	
830.7840	Water solubility: column elution method, shake flask method	41055803	62719	OWN	
830.1750	Certified Limits	41055804	62719	OLD	
Signature:		Name and Title: Diego Fonseca, Global Regulatory Manager Dow AgroSciences LLC			Date: August 27, 2015

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
830.1750	Certified Limits	43777502	62719	OWN	
830.1800	Enforcement analytical method	41055802	62719	OWN	
830.6302	Color	41055803	62719	OWN	
830.6303	Physical state	41055803	62719	OWN	
830.6304	Odor	41055803	62719	OWN	
830.6313	Stability to sunlight, normal and elevated temperatures, metals, and metal ions	41055803	62719	OWN	
830.6314	Oxidizing or reducing action	41973501	62719	OWN	
830.6315	Flammability	N/A FOR TECH			
830.6316	Explodability	41973501	62719	OWN	
830.6317	Storage stability of product	WAIVED	62719	OWN	
830.6319	Miscibility	N/A FOR TECH			
830.6320	Corrosion characteristics	WAIVED	62719	OWN	
830.6321	Dielectric breakdown voltage	N/A FOR TECH			
830.7000	pH of water solutions or suspensions	N/A FOR TECH			
830.7050	UV/Visible absorption	44543504	62719	OWN	
830.7100	Viscosity	N/A FOR TECH			
830.7200	Melting point/melting range	41055803	62719	OLD	
830.7200	Melting point/melting range	41973501	62719	OWN	
830.7220	Boiling point/boiling range	N/A FOR TECH			
830.7300	Density/relative density	41055803	62719	OWN	
830.7300	Density/relative density	47290627	62719	OWN	
830.7370	Dissociation constant in water	41055803	62719	OWN	
830.7550	Partition coefficient (n-octanol/water), shake flask method	41055803	62719	OWN	
830.7570	Partition coefficient (n-octanol/water), estimation by liquid chromatography	N/A FOR TECH			
830.7860	Water solubility: generator column method	N/A FOR TECH			
830.7950	Vapor pressure	41055803	62719	OWN	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
870.1100	Acute oral toxicity	See AcuteTox Profile (Attach 4)	Industry Task Force II on 2,4-D Research Data	OWN	
870.1200	Acute dermal toxicity	See AcuteTox Profile (Attach 4)	Industry Task Force II on 2,4-D Research Data	OWN	
870.1300	Acute inhalation toxicity	See AcuteTox Profile (Attach 4)	Industry Task Force II on 2,4-D Research Data	OWN	
870.2400	Acute eye irritation	See AcuteTox Profile (Attach 4)	Industry Task Force II on 2,4-D Research Data	OWN	
870.2500	Acute dermal irritation	See AcuteTox Profile (Attach 4)	Industry Task Force II on 2,4-D Research Data	OWN	
870.2600	Skin sensitization	47392101	62719	OWN	
71-1	Acute Avian Oral Toxicity (LD50) in Bobwhite Quail or Mallard Duck	41158303	62719	OLD	
71-2(a)	Avian Dietary LC50 (bobwhite)	41158305	62719	OLD	
71-2(b)	Avian Dietary LC50 (mallard)	41158304	62719	OLD	
72-1(b)	Freshwater Fish LC50 (preferably rainbow and bluegill)	41158306	62719	OLD	
72-1(c)	Freshwater Fish LC50 (preferably rainbow and bluegill)	41737303	62719	OLD	
72-1(d)	Fish Tox Rainbow	41158306	62719	OLD	
072-2(a)	Invertebrate Toxicity Freshwater LC50	41158312	62719	OLD	
072-2(b)	Invertebrate Toxicity Freshwater LC50	41835207	62719	OLD	
72-3(a)	Acute LC50 Estuarine and Marine Organisms (fish)	41835205	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
72-3(a)	Acute LC50 Estuarine and Marine Organisms (fish)	41835201	62719	OLD	
72-3(b)	Acute LC50 Estuarine and Marine Organisms (mollusk)	41835202	62719	OLD	
72-3(b)	Acute LC50 Estuarine and Marine Organisms (mollusk)	41835204	62719	OLD	
72-3(c)	Acute LC50 Estuarine and Marine Organisms (shrimp)	41835203	62719	OLD	
72-3(c)	Acute LC50 Estuarine and Marine Organisms (shrimp)	41835206	62719	OLD	
72-3(d)	Acute LC50 Estuarine and Marine Organisms (fish)	41835202	62719	OLD	
72-3(e)	Acute LC50 Estuarine and Marine Organisms (mollusk)	41835201	62719	OLD	
72-3(f)	Acute LC50 Estuarine and Marine Organisms (shrimp)	41835203	62719	OLD	
72-4(a)	Early Life Stage in Fish	41737305	62719	OLD	
72-4(b)	Life Cycle in Aquatic Invertebrates (Daphnia/Mysid)	41835207	62719	OLD	
081-1	Acute Oral Toxicity in the Rat	44725301	62719	OLD	
081-2	Acute Dermal Toxicity	44734201	62719	OLD	
081-3	Acute Inhalation Toxicity in the Rat	44725302	62719	OLD	
081-3	Acute Inhalation Toxicity in the Rat	163712	62719	OLD	
081-4	Primary Eye Irritation in the Rabbit	44725303	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
081-5	Primary Dermal Irritation	44734202	62719	OLD	
081-6	Dermal Sensitization	163713	62719	OLD	
081-6	Dermal Sensitization	44725304	62719	OLD	
82-1(a)	90-Day Feeding Study in the Rodent (rat)	41896701	62719	OLD	
82-1(b)	90-Day Feeding Study in the Non-Rodent (dog)	42780003	62719	OLD	
82-1(b)	90-Day Feeding Study in the Non-Rodent (dog)	42780005	62719	OLD	
82-2	21-Day Dermal	41735302	62719	OLD	
82-2	21-Day Dermal	41735305	62719	OLD	
83-3(a)	Teratogenicity in the Rat	42304601	62719	OLD	
83-3(a)	Teratologenicity in the Rat	42304602	62719	OLD	
83-3(b)	Teratogenicity in the Rabbit	42304603	62719	OLD	
83-3(b)	Teratologenicity in the Rabbit	42304604	62719	OLD	
84-2(a)	Gene Mutation	41409803	62719	OLD	
084-2(b)	Structural Chromosome Aberration	41420005	62719	OLD	
84-2(b)	Structural Chromosome Aberration	41409806	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
84-4	Other Genotoxic Effects	41870103	62719	OLD	
84-4	Other Genotoxic Effects	41409809	62719	OLD	
085-1	General Metabolism	142119	62719	OLD	
85-1	General Metabolism	42261801	62719	OLD	
123-1(a)	Seed Germination/Seedling Emergence	42449201	62719	OLD	
123-1(a)	Seed Germination/Seedling Emergence	42772902	62719	OLD	
123-1(a)	Seed Germination/Seedling Emergence	43526901	62719	OLD	
850.4250	Seed Germination/Seedling Emergence	42416802	62719	OLD	
123-1(b)	Vegetative Vigor	42416801	62719	OLD	
123-1(b)	Vegetative Vigor	42172905	62719	OLD	
123-1(b)	Vegetative Vigor	42343902	62719	OLD	
123-1(b)	Vegetative Vigor	42772904	62719	OLD	
123-2	Aquatic Plant Growth	41735202	62719	OLD	
123-2	Aquatic Plant Growth	41735203	62719	OLD	
123-2	Aquatic Plant Growth	41735204	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
123-2	Aquatic Plant Growth	41735205	62719	OLD	
123-2	Aquatic Plant Growth	41735206	62719	OLD	
141-1	Honey Bee Acute Contact (LD50)	44517301	62719	OLD	
141-1	Honey Bee Acute Contact (LD50)	44517302	62719	OLD	
161-1	Hydrolysis	42735401	62719	OLD	
161-1	Hydrolysis	42770501	62719	OLD	
161-1	Hydrolysis	42770502	62719	OLD	
161-2	Photodegradation in Water	42749702	62719	OLD	
161-3	Photodegradation in Soil	Waived	62719	OLD	
161-4	Photodegradation in Air	Waived	62719	OLD	
162-1	Aerobic Soil Metabolism Study	43415901	62719	OLD	
162-2	Aerobic Soil Metabolism Study	Waived	62719	OLD	
162-3	Anaerobic Aquatic Metabolism Study	43691001	62719	OLD	
162-4	Aerobic Aquatic Metabolism Study	Waived	62719	OLD	
163-1	Leach/Adsorption/Desorption	Waived	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
163-2	Lab Volatility Study	42059601	62719	OLD	
163-3	Volatility - field	Waived	62719	OLD	
164-1	Soil Field Dissipation Study	43514601	62719	OLD	
164-1	Soil Field Dissipation Study	43542801	62719	OLD	
164-1	Soil Field Dissipation Study	43640601	62719	OLD	
164-1	Soil Field Dissipation Study	43705202	62719	OLD	
164-1	Soil Field Dissipation Study	43762401	62719	OLD	
164-1	Soil Field Dissipation Study	43762402	62719	OLD	
164-1	Soil Field Dissipation Study	43762403	62719	OLD	
164-1	Soil Field Dissipation Study	43762404	62719	OLD	
164-1	Soil Field Dissipation Study	43533401	62719	OLD	
164-1	Soil Field Dissipation Study	43831701	62719	OLD	
164-1	Soil Field Dissipation Study	43831702	62719	OLD	
164-1	Soil Field Dissipation Study	43849102	62719	OLD	
164-1	Soil Field Dissipation Study	43864001	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
164-1	Soil Field Dissipation Study	43872703	62719	OLD	
164-1	Soil Field Dissipation Study	43914701	62719	OLD	
164-3	Forestry Field Dissipation	44603101	62719	OWN	
164-3	Forestry Field Dissipation	43908303	62719	OLD	
164-3	Forestry Field Dissipation	43927101	62719	OLD	
171-4	Magnitude of Residue in Irrigated Crops	43356302	62719	OLD	
171-4(a)	Nature of Residue in Plants (Potato)	42423101	62719	OLD	
171-4(a)	Nature of Residue in Plants (Wheat)	42439701	62719	OLD	
171-4(a)	Nature of Residue in Plants (Wheat)	42615601	62719	OLD	
171-4(a)	Nature of Residue in Plants (Potato)	43496101	62719	OLD	
171-4(b)	Nature of Residue in Plants (Potato)	Waived	62719	OLD	
860.1340	Residue Analytical Method (Plants)	46293601	959857	PL	
171-4(c)	Residue Analytical Method (Plants)	43691101	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43289301	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43665201	62719	OLD	

DATA MATRIX

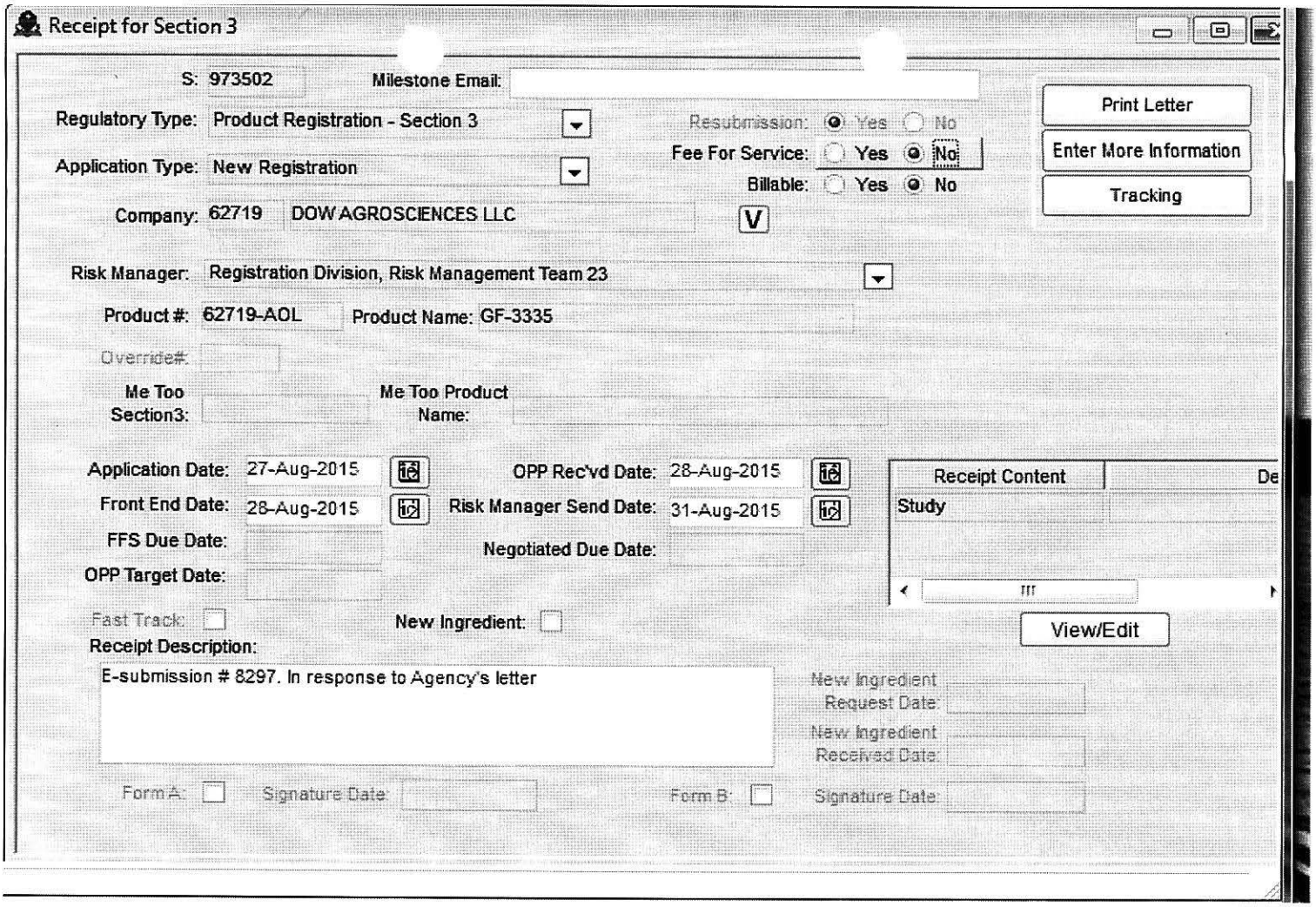
Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
171-4(c)	Residue Analytical Method (Plants)	43592101	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43610802	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43669801	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43676801	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43693701	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43697801	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43709701	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43779501	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43779503	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	43797901	62719	OLD	
171-4(c)	Residue Analytical Method (Plants)	44190301	62719	OWN	
171-4(c)	Residue Analytical Method (Plants)	44190302	62719	OWN	
171-4(c)	Residue Analytical Method (Plants)	44024801	62719	OWN	
171-4(c)	Residue Analytical Method (Plants)	40881401	PL	PL	
171-4(e)	Storage Stability	43809901	62719	OLD	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.: 62719-AOL			
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product: GF-3335			
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
171-4(e)	Storage Stability	44603101	62719	OWN	
171-4(k)	Magnitude of Residue Corn, Field	43676801	62719	OLD	
171-4(k)	Magnitude of Residue Range, Grasses	43779501	62719	OLD	
171-4(k)	Magnitude of Residue Range, Grasses	43779503	62719	OLD	
171-4(k)	Magnitude of Residue Range, Grasses	43610802	62719	OLD	
171-4(k)	Magnitude of Residue Range, Grasses	43592101	62719	OLD	
N/A	DEREK Structure Activity Relationship Toxicity Endpoint Assessment for 2,6-Dichlorophenylacetic Acid (CAS 6575-24-2)	46454401	62719	OLD	
N/A	Error Only Response to the Environmental Fate and Effects Division's Risk Assessment for the Reregistration Eligibility	46201801	62719	OLD	
N/A	Error Only Response to Health Effects Division's Risk Assessment for the Reregistration Eligibility Decision (RED) For	46253601	959857	PL	
N/A	Lack of Relevance of Toxicology Findings in Dogs for Assessment of Potential Human Health Risks of 2,4-D: A White	45861201	62719	OWN	
N/A	Evaluation of Potential Aggregate Human Health Risks Associated with Agricultural and Consumer Uses of 2,4-D	46349601	62719	OWN	
N/A	Dispersion and Dissipation of the Herbicide 2,4-D in Green Lake, Minnesota	45931801	62719	OWN	
N/A	Dispersion and Dissipation of the Herbicide 2,4-D in Lake Woodruff, Florida	45897101	62719	OWN	
N/A	Hydrolysis of 2,4-Dichlorophenoxyacetic Acid-2-Butoxyethyl Ester To 2,4-Dichlorophenoxyacetic Acid in A Soil/Water	41353701	62719	OWN	
N/A	Comparative Inter-Species Pharmacokinetics of Phenoxyacetic acid Herbicides and Related Organic Acids	46328601	62719	OWN	

DATA MATRIX

Date: August 27, 2015		EPA Reg No.:	62719-AOL		
Registrant's Name & Address:	Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268	Product:	GF-3335		
Ingredient: 2,4-D	Chemical: 030001 for 2,4-D				
Guideline Reference Number	**Guideline Study Name**	**MRID Number**	**Submitter**	**Status**	
N/A	Association Between Canine Malignant Lymphoma Living in Industrial Area and Use of Chemical by Dog Owners	45516101	62719	OWN	
CITE-ALL			Industry Task Force II on 2,4-D Research Data	OWN	
CITE-ALL			959857	PL	
CITE-ALL			Agricultural Re-Entry Task Force	OWN	
CITE-ALL			Endangered Speices Task Force	OWN	
CITE-ALL			Outdoor Residential Exposure Task Force	OWN	
CITE-ALL			Spray Drift Task Force	PER	



Resubmission

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

August 31, 2015

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

BRUCE A. HOUTMAN
DOW AGROSCIENCES LLC
9330 ZIONSVILLE RD 308/2E
INDIANAPOLIS, IN 46268-1054

PRODUCT NAME: GF-3335
COMPANY NAME: DOW AGROSCIENCES LLC
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 62719-AOL
EPA RECEIPT DATE: 08/28/15

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 23, at (703) 305-1243.

Sincerely,

Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Fee for Service {973502Â~

This package includes the following

- (•) New Registration
- ( ) Amendment

☑ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ___

for Division

- ( ) AD
- ( ) BPPD
- (•) RD

Risk Mgr. 23

Receipt No. S- 973502

EPA File Symbol/Reg. No. 62719-AOL

Pin-Punch Date: 8/28/2015

☒ This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: $ _____

Parent/Child Decisions:

☐ Inert Cleared for Intended Use ☐ Uncleared Inert in Product

Reviewer: KMorris Date: 8/31/15

Remarks: Resubmission

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060 Print Form

EPA United States Environmental Protection Agency Washington, DC 20460

[X] Registration [ ] Amendment [ ] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number: Dow AgroSciences / 62719-AOL
2. EPA Product Manager: Kathryn Montague
3. Proposed Classification: [X] None [ ] Restricted
4. Company/Product (Name): Dow AgroSciences / GF-3335
PM#: 23
5. Name and Address of Applicant *(Include ZIP Code)*:
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268
[ ] *Check if this is a new address*
6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:
EPA Reg. No. _____
Product Name _____

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[ ] Notification - Explain below.
[ ] Final printed labels in response to Agency letter dated _____
[ ] "Me Too" Application.
[X] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

In response to EPA's letter received 19-August-2015 (enclosed for your reference), Dow AgroSciences is respectfully submitting the Group B report, corresponding to physical-chemical characteristics of GF-3335 (EPA File Symbol 62719-AOL).

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging: [ ] Yes* [ ] No
** Certification must be submitted*

Unit Packaging: [ ] Yes [ ] No
If "Yes" Unit Packaging wgt. / No. per container

Water Soluble Packaging: [ ] Yes [ ] No
If "Yes" Package wgt / No. per container

2. Type of Container: [ ] Metal [ ] Plastic [ ] Glass [ ] Paper [ ] Other (Specify) _____

3. Location of Net Contents Information: [ ] Label [ ] Container

4. Size(s) Retail Container

5. Location of Label Directions: [ ] On Label [ ] On Labeling accompanying product

6. Manner in Which Label is Affixed to Product: [ ] Lithograph [ ] Paper glued [ ] Stenciled [ ] Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Diego Fonseca	Regulatory Leader	(317) 337-4693

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature: Fonseca
3. Title: Regulatory Leader
4. Typed Name: Diego Fonseca
5. Date: August 27, 2015

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
ANDPOLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

02/FEB/2016

MEMORANDUM

Subject: Acute Toxicity Review for EPA File Symbol 62719-AOL

Name of Pesticide Product:	GF-3335
EPA File Symbol:	62719-AOL
DP Barcode:	D428363
Decision No.:	505414
Action Code:	R320
PC Code:	051505 (2,4-D choline salt)

From: Eugenia McAndrew, Biologist
Chemistry, Inerts, Toxicology Assessment Branch
Registration Division (7505P)

Team Leader-Tox

To: Emily Schmid, RM Team 23
Herbicide Branch
Registration Division (7505P)

Applicant: Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46208

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
2,4-Diclorophenoxyacetic acid, choline salt choline salt	55.7
Other Ingredient(s):	44.3
Total:	100.0%

38% 2,4-dichlorophenoxyacetic acid equivalent

ACTION REQUESTED: The Risk Manager requests a review of six acute toxicity studies submitted to support registration of the proposed product, EPA File Symbol 62719-AOL.

BACKGROUND: Dow AgroSciences has submitted six acute toxicity studies (MRID Nos. 496333-02 to -07) to support the registration of the proposed product, GF-3335, EPA File Symbol 62719-AOL. The submission also includes a basic CSF dated January 8, 2015 which must be reviewed and accepted by the product chemists in the Chemistry, Inerts, Toxicology Assessment Branch.

GLP: Yes

DEVIATIONS: None

LABELING:

PRODUCT ID #: 062719-00695

PRODUCT NAME: GF-3335

PRECAUTIONARY STATEMENTS

SIGNAL WORD: WARNING

SPANISH SIGNAL WORD: AVISO
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Hazards to Humans and Domestic Animals:

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield, or safety glasses). Wear long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves.

First Aid:

If swallowed:
-Call a poison control center or doctor immediately for treatment advice.
-Have person sip a glass of water if able to swallow.
-Do not induce vomiting unless told to by a poison control center or doctor.
-Do not give anything by mouth to an unconscious person.

If in eyes:
-Hold eye open and rinse slowly and gently with water for 15-20 minutes.
-Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
-Call a poison control center or doctor for treatment advice.

If on skin:
-Take off contaminated clothing.
-Rinse skin immediately with plenty of water for 15-20 minutes.
-Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

User Safety Recommendations:

-Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using the toilet. Remove and wash contaminated clothing before reuse.
-Users should remove clothing/PPE immediately of pesticide gets inside. Then wash thoroughly and put on clean clothing.
-Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

DATA EVALUATION RECORD

Product Reg. No.: 62719-AOL
Product Name: GF-3335

1. DP BARCODE: 428363				
2. PC CODE: 051505				
3. CURRENT DATE: February 2, 2016				
4. TEST MATERIAL: GF-3335 [Test Item No. TSN307287; Batch/Lot No. ENBK-144192-019A; 56.8 wt% or 678 g/L 2,4-D AI (38.7 wt% or 462 g/L 2,4-D AE); density 1.1939 g/mL; (tan liquid)]				
Study/Species/Lab Study # /Date	**MRID**	**Results**	**Tox Cat**	**Core Grade**
Acute oral toxicity / rat Jai Research Foundation Dept. of Toxicology Study # 401-1-01-8645/July 11, 2014 OCSPP 870.1100; OECD 423	49633302	LD_{50} females > 300 mg/kg 3 groups of 3 animals each were tested as follows: 2000 mg/kg 300 mg/kg 300 mg/kg Mortality: 2000 mg/kg: 3/3 300 mg/kg: none Results: 2000 mg/kg: All rats died by day 3. Toxic signs noted prior to death included lethargy and chromodacryorrhea. Necropsy revealed congestion of the liver. 300 mg/kg: All rats survived and gained weight. No clinical signs noted of toxicity were noted. No lesions of pathological significance were noted at necropsy.	II	A

Acute dermal toxicity / rat Jai Research Foundation Dept. of Toxicology Study # 403-1-01-8646/July 12, 2014 OCSPP 870.1200; OECD 402	49633303	LD_{50} > 2000 mg/kg (both sexes) All animals survived and gained weight. No clinical signs were observed. Internal and external examinations at necropsy did not reveal any abnormalities.	III	A
Acute inhalation toxicity / rat Jai Research Foundation Dept. of Toxicology Study # 405-1-01-8647/July 17, 2014 OCSPP 870.1300; OECD 403	49633304	LC_{50} > 5.97 mg/L (both sexes) MMAD: 2.43 µm GSD: 2.19 All animals survived. All animals exceeded their initial body weights by day 3 and continued to gain weight through the remainder of the study. No clinical signs were observed. Internal and external examinations at necropsy did not reveal any abnormalities.	IV	A
Primary eye irritation / rabbit Jai Research Foundation Dept. of Toxicology Study # 407-1-01-8649/July 12, 2014 OCSPP 870.2400; OECD 405	49633305	3 females tested pH 6.47 Both systemic and topical analgesics were used prior to and after instillation of test item. Corneal opacity was observed in 3/3 eyes at 24 and 48 hours persisting in one eye through day 7. Positive scores for conjunctival redness were noted in 3/3 eyes from 48 persisting through day 7; positive scores for conjunctival chemosis were noted in 2 eyes at 24 hours persisting in one eye through day 7; all eyes were free of irritation by day 14.	II	A

Primary dermal irritation / rabbit Jai Research Foundation Dept. of Toxicology Study # 406-1-01-8648/July 12, 2014 OCSPP 870.2500; OECD 404	49633306	3 males tested pH 6.47 PDI = 1.3 Very slight erythema and very slight edema were noted at 3/3 sites one hour after patch removal. By 24 hours, well defined erythema and very slight edema were present at all sites. At 72 hours, well defined erythema was still present at 2/3 sites and very slight erythema at one site plus very slight edema at 2/3 sites. All sites were free of irritation by day 7.	IV	A
Dermal sensitization/mouse Jai Research Foundation Dept. of Toxicology Study # 409-1-01-8650/August 14, 2014 OCSPP 870.2600; OECD 429	49633307	Positive for sensitization % tested 5% 25% 50% SI value 1.60 3.85* 5.07* *Stimulation Index values > 3 are positive. Appropriate positive control provided	--	A

Core Grade Key: A =Acceptable, S = Supplementary, U = Unacceptable, D = Data Gap W= Waived

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 27, 2016

Diego Fonseca
Regulatory Leader
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Subject: Protocol Review: Proposed Plant Testing Protocol
Submission Date: March 29, 2016
Decision Number: 505414

Dear Mr. Fonseca:

The protocol submission referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA, as amended, has been reviewed. Please see the attached review dated 4/25/2016.

Please note that the Agency's review of this protocol is considered complete. Any future submissions related to this protocol must be submitted under the appropriate PRIA category.

If you have any questions, please contact Emily Schmid by phone at 703-347-0189, or via email at schmid.emily@epa.gov.

Sincerely,
Emily Schmid for

Kathryn V. Montague, Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 25, 2016

PC Code: 051505
DP barcode: D433125

MEMORANDUM

SUBJECT: **2,4-D choline:** Response to Registrant Proposed Plant Testing Protocol

FROM: Edward Odenkirchen, Ph.D., Senior Advisor
Immediate Office
Environmental Fate and Effects Division (7507P)

THRU: Greg Orrick, Risk Assessment Process Leader
Sujatha Sankula, Chief
Environmental Risk Branch 1
Environmental Fate and Effects Division (7507P)

TO: Emily Schmid, Risk Manager Reviewer
Kathryn Montague, Product Manager Team 23
Dan Kenny, Branch Chief
Herbicide Branch
Registration Division (7505P)

The Registration Division requested the Environmental Fate and Effects Division (EFED) to review an outline for a proposed plant testing protocol voluntarily submitted by the 2,4-D choline registrant in support of a new product registration for GF-3335 (EPA Reg. No. 62719-XX). This outline for a protocol was submitted in an effort to address any potential concerns for the modification of non-target plant toxicity of 2,4-D choline when the GF-3335 product is tank-mixed with glufosinate in accordance with a GF-3335 proposed product label recommendation.

Because the Agency currently has no universal policy concerning the generation of multicomponent non-target plant effects testing for tank mixes herbicides, EFED **has not** made a determination whether the outlined protocol would address some specific data requirement to support registration. Instead EFED has considered if the potential for a study conducted under the submitted protocol would be useful in generating mixture-modified toxicity endpoints for potential use in any risk assessment supporting a registration decision on GF-3335.

EFED finds that the protocol is similar to agreed-upon plant testing for generating effects thresholds for the Enlist Duo dual active ingredient formulation involving 2,4-D choline and glyphosate. Therefore, consistent with the Enlist Duo approach to testing, EFED concludes that

the proposed protocol has the potential for generating effects endpoints useful for inclusion in an Agency ecological risk assessment. The ultimate acceptance of data submitted under such a protocol would be dependent upon the study conforming to normal plant effects guideline study data quality criteria.

Schmid, Emily

From: Schmid, Emily
Sent: Wednesday, March 30, 2016 9:34 AM
To: Odenkirchen, Edward
Cc: Sankula, Sujatha
Subject: FW: NTP Preliminary Protocol Proposal GF-3335 + Glufosinate Tank Mix
Attachments: Protocol outline for GF-3335 tank mix study Mar 24 2016.docx

Good morning,

Dow's new Enlist product, that contains only 2,4-D is currently under review (EPA File Symbol 62719-AOL). They want to be able to list tank mixing with glufosinate on the label but anticipate the same synergy issues we are having with Enlist Duo. To address this, they want to perform vegetative vigor and seedling emergence studies similar to those that are currently underway for Enlist Duo. In preparation, they have submitted the attached overview. Could you take a look at it and provide comments?

If you need any other information or have questions, please feel free to let me know.

Thank you!
Emily

From: Montague, Kathryn V.
Sent: Wednesday, March 30, 2016 9:12 AM
To: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: FW: NTP Preliminary Protocol Proposal GF-3335 + Glufosinate Tank Mix

Hi, Emily,

This is a one-page "overview" of what Dow wants to do for the plant studies to address possible synergy on the Enlist "solo" + glufosinate mix. Could you run this past EFED and see if they are OK providing comment on it? It's not really a full protocol, and it's not for a Part 158 study, so I think we're ok to not have them come in under PRIA.

Thanks,
Kay

From: Fonseca, Diego (D) [mailto:dfonseca@dow.com]
Sent: Tuesday, March 29, 2016 4:11 PM
To: Montague, Kathryn V. <Montague.Kathryn@epa.gov>
Subject: NTP Preliminary Protocol Proposal GF-3335 + Glufosinate Tank Mix

Dear Kay.
As discussed during our meeting last March 22nd, DAS is interested to start as soon as possible, the Non Target Plant studies (NTP) on the tank mix GF-3335 (EPA File Symbol 62719-AOL) + Glufosinate. For such effect, DAS has developed for the EPA's review and comments a preliminary proposal. This proposal includes seedling emergence and vegetative vigor tests, specific on the GF-3335 + Glufosinate tank mix. An outline of both protocols can be seen from the Word document attached. This proposal follows as close as possible on the NTP protocols

agreed with RD and EFED for Enlist Duo (currently in progress). DAS will be willing to meet with EPA as soon as deemed appropriate to discuss and agree on final protocols.

We'll really appreciate a prompt attention to this e-mail.
Sincerely,

Diego Fonseca Regulatory Manager
Office: 317.337-4693 dfonseca@dow.com

Dow AgroSciences LLC
9330 Zionsville Road, Indianapolis, IN 46268

www.dowagro.com

Dow AgroSciences | *Solutions for the Growing World*

Vegetative Vigor and Seedling Emergence Protocols for GF-3335 + Glufosinate Tank Mix

Guidelines:	Crop Species	OCSPP 850.4150	
		OCSPP 850.4100	
	Weed Species	OCSPP 850.4150	Note: Due to issues with low germination rates of weed species, seedling emergence studies are not being conducted
Endpoints	Crop species	NOEC, ER_{25}, ER_{50}	Due to design of study ER_{50} may be reported as greater than highest dose tested. Focus of study is to generate ER_{25} and NOEC endpoints for all tested species. Endpoints will be generated for dry weight, plant height, and survival and/or emergence. Measurement of weed endpoints may be modified to accommodate plant growth (e.g. measure diameter of rosette instead of plant height)
	Weed species	NOEC, ER_{25}, ER_{50}	
Test Substance	GF-3335 + Glufosinate 280 SL	2,4-D choline + glufosinate	Note: Representative tank mixture
Test rate	1065 g 2,4-D acid/ha + 542 g glufosinate acid/ha		Note: Rates based on acid equivalents and represent maximum labeled rates. Ratio of 1 part 2,4 D acid to 0.5 parts of glufosinate acid will be maintained through the dose response
Test dose	g 2,4-D acid/ha	g glufosinate/ha	Note: 1 to 0.5 ratio 2,4-D:glufosinate ratio will be carried throughout the dose range (dilution factor of 2). Test doses based on anticipated NOECs generated during previous 2,4-D and glufosinate non-target terrestrial plant research
	1065	542	
	532	271	
	266	135.5	
	133	67.8	
	66.5	33.9	
	33.25	16.9	
	16.6	8.5	
	8.3	4.25	
	4.2	2.1	
	2.1	1.0	
	1.0	0.5	
Test Species	Crop	Corn, oat, sorghum, onion, soybean, radish, buckwheat, cucumber, mustard, tomato, ryegrass, lettuce, cabbage, cucumber, carrot	Note: based on Environmental Fate and Ecological Risk Assessment for the registration review of glufosinate and 2,4-D
	Weed	Palmer amaranthus	Listed weed species may need further

		(AMAPA); Conyza Canadensis (ERICA); Sesbania herbacea (SEBEX)	discussion based on the feasibility of conducting vegetative vigor testing based on propagation issue in the greenhouse as well as other issues. Furthermore, previous study has shown weed species are not as sensitive as crop species indicating crop species should be protective of any weed species.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 06, 2016

PC Codes: 051505
DP Barcode: 428361

MEMORANDUM

Subject: **2,4-D choline:** Review of Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335

From: Faruque Khan, Ph.D., Senior Fate Scientist
Environmental Risk Branch 1
Environmental Fate and Effects Division (7507P)

Thru: Sujatha Sankula, Ph.D., Branch Chief
Environmental Risk Branch 1
Environmental Fate and Effects Division (7507P)

SUJATHA SANKULA

Digitally signed by SUJATHA SANKULA
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=SUJATHA SANKULA, dnQualifier=0000034075
Date: 2016.06.07 08:07:58 -04'00'

To: Emily Schmid, Risk Manager Reviewer
Kathryn Montague, Risk Manager, PM 23
Herbicide Branch
Registration Division (7505P)

The Environmental Fate and Effects Division has reviewed the low-speed wind tunnel droplet size spectrum determinations with GF-3334 study. This study was submitted in support of product registration of 2,4-D Choline salt. A total of 101 nozzle/pressure combinations were found to be compatible to nozzle AIXR 11004 with GF-2726 (Enlist Duo) operated @ 40 psi. The result of the review is shown in the table below. Additional deficiencies and reviewer's comments can be found in the study Data Evaluation Record.

Table 1: Reviews of Environmental Fate Data for 2,4-D Choline

Guideline #	Data Requirement	MRID #	Deficiency	Study Classification
None	Wind Tunnel Droplet Size Measurements of 50 nozzles with variable pressures	49633308 49903101[a]	No major deficiency.	Acceptable

[a] Supplemental Information- Havens, P.L. 2016. Supplemental Information for MRID 49633308 - Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335. Unpublished study performed (Study # 160687)

Test material:
Test Substance: TSN306327 and TSN309389
Chemical name: 2,4-D choline salt (GF-3335)

MRID 49633308 and 49903101

EPA PC Code 051505

OCSPP Guideline: Not applicable
OECD Data Point: Not applicable

Primary Reviewer: [*Faruque Khan, Senior Scientist, EFED, ERB1*]

Date: 06/06/2016

Secondary Reviewer: [Charles Peck, Environmental Engineer, *EFED, ERB1V*]

2016.06.06 13:37:00 -04'00'

Date: 06/06/2016

Low Speed Wind Tunnel Droplet Size Spectrum Measurements

Report: MRID 49633308. Schleier III, J.J. Havens, P.L. Henry, R.S., G.R. Kruger, 2015. Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335. Unpublished study performed (Study # 150810.01) by West Central Research and Extension Center, Univ. of Nebraska-Lincoln. 402 West State Farm Road, North Platte, NE. and submitted by the Dow AgroSciences LLC, Indianapolis, IN 46268. Experiment initiation 3/16/2015 and completion 06/03/2015 (p. 4).

MRID 49903101. Havens, P.L. 2016. Supplemental Information for MRID 49633308 - Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335. Unpublished study performed (Study # 160687) and submitted by the Dow AgroSciences LLC, Indianapolis, IN 46268. 4/22/2016

Guideline: Not applicable

Statements: This method was not conducted according to USEPA GLP Standards. Signed and dated statements of Data Confidentiality, Quality Assurance, and GLP were provided (pp. 2-5).

Classification: The Agency finds that the experiment meets the criteria for a scientifically valid study and is classified as **acceptable**.

Reviewer: *Faruque Khan, Senior Scientist, EFED, ERB1*

Signature: Faruque A. Khan **Date:** 06/06/2016

EXECUTIVE SUMMARY

A low speed wind tunnel study was conducted to evaluate droplet size spectra for 2,4-D formulation GF-3335 herbicide using 50 nozzles representing a wide range of designs from several manufactures. The objective of this study was to evaluate the drop size distribution (DSD) produced with GF-3335 in a low speed wind tunnel with these nozzles and compare them to the results produced with an Air Induction Extended Range 11004 (AIXR 11004) nozzle at 40 psi using 2.8% v/v GF-2726 (Enlist Duo Herbicide), which also represents a nozzle used in a field study (MRID 48844001). The droplet size spectra of nozzles were measured using laser diffraction technique in the low speed wind tunnel facility at the University of Nebraska-Lincoln West Central Research and Extension Center in North Platte, Nebraska. The percent of driftable fines (≤141 μm) from the AIXR 11004 at 40 psi using 2.8% v/v GF-2726 (Enlist Duo) from wind tunnel study were used as one of the performance standard to evaluate acceptable nozzles that can be applied for GF-3335 formulation for spray drift reduction.

The measured droplet distribution was input into the Agricultural Dispersion model (AGDISP) to determine if the combination of GF-3335 and nozzle/orifice/pressure generates deposition that is statistically less than or equal to GF-2726 through an AIXR 11004 at 40 psi at 30 ft. Based on a metric of percent of cumulative volume fraction ≤141 μm and the deposition fractions at 30 ft from AGDISP (v8.26) modeling, the following nozzle/pressure combinations for GF-3335 provided equivalent or reduced driftable fines as compared to AIXR 11004 using GF-2726 at 40 psi for ground application **(Table 1)**.

Table 1. Specifications of Tested Nozzles with Maximum Operating Pressure

Manufacturer	Nozzle Design	Model	Acceptable Maximum Operating Pressure (psi)
Albuz	AVI	110025	40
			50
			60
		11003	40
			50
			80
		11004	40
			90
		11005	40
			90
		11006	40
			90
Greenleaf Technologies	TurboDrop XL (TDXL)	11003	40
			55
		11004	40
			60
			70
			80
		11006	40
			90
		11008	40
			90

Table 1. Specifications of Tested Nozzles with Maximum Operating Pressure			
Manufacturer	**Nozzle Design**	**Model**	**Acceptable Maximum Operating Pressure (psi)**
	TurboDrop (TDXL-D)	11002	40
			70
			80
			90
		110025	40
			70
			90
		11003	40
			90
		11004	40
			90
		11006	40
			100
		11008	40
			80
	TurboDrop DF-D	TADF025-D	40
			80
		TADF03-D	40
			90
		TADF04-D	40
			90
		TADF05-D	40
			90
		TADF06-D	40
			90
Hypro	Ultra Low Drift (ULD)	12004	40
			70
			80
		12005	40
			50
		12006	40
			60
Lechler, Inc.	ID Air Induction (ID)	11003	40
			60
		11004	40
			60
			80
		11005	40
			60
TeeJet Technologies	Air Induction (AI)	11002	40
			60
			70
		11025	40
			60
			70
		11003	40
			60
			70
		11004	40

Table 1. Specifications of Tested Nozzles with Maximum Operating Pressure			
Manufacturer	**Nozzle Design**	**Model**	**Acceptable Maximum Operating Pressure (psi)**
			60
			80
		11005	40
			60
			80
		11006	40
			70
			80
		11008	40
			70
	Air Induction Extended Range (AIXR)	11004	40
		11005	40
			50
		11006	40
	Air Induction Turbo Twinjet (AITTJ)	11004	40
		11006	40
	Turbo Tee Air Induction (TTI)	11002	40
			70
		110025	40
			70
		11003	40
			70
		11004	40
		11005	40
		11006	40
Wilger Industries, Ltd.	Combi-Jet MR	11006	40
			50
		11108	40
			50
		11010	40

A. BACKGROUND INFORMATION

The emission droplet size spectrum formed by the atomization of a pesticide is affected by many application conditions (nozzle type, pressure, etc.) and the physical properties of the tank mix (*e.g.* dynamic surface tension, viscosity etc.). Drift can be measured directly in field experiments, but a field scale study is labor-intensive and expensive and is thus prohibitive for testing large numbers of operational parameters. The characteristics of sprays in wind tunnels have been shown to correlate well with the potential of off-target drift (Fritz et. al., 2010). Existing ISO 22856 (ISO, 2008), ASABE S572.1 (ASABE, 2012), ASTM E2798-11(ASTM, 2012) and the draft USEPA standard testing methods protocol titled "Generic Verification Protocol for Testing Pesticide Application Spray Drift Reduction Technologies for Row and Field Crops" (USEPA, 2014) offer guidance on wind tunnel testing methodology. The current study was conducted to determine droplet size spectra for nozzles representing a wide range of design from several manufactures. The goal was to determine the droplet size distribution (DSD) produced by GF

3335 formulation (a 1.2% v/v of dichlorophenoxyacetic acid choline salt) in a low speed wind tunnel with a variety of nozzle tips and pressures and compared them to the DSD produced with GF-2726 (a mixture 2.4% v/v mixture of Enlist Duo herbicide) by the AIXR 11004 nozzle at 40 psi. Droplet size distribution is a critical input parameter for spray drift modeling programs such as AgDRIFT and AGDISP. These models can provide potential deposition profiles using DSD and many other application parameters used in pesticide application.

B. MATERIALS and METHODS

The experiment was performed in the low-speed wind tunnel facility at the West Central Research and Extension Center, University of Nebraska-Lincoln, North Platte, Nebraska (UNL:WCREC). The droplet spectra were analyzed using a Sympatec Helos/Vario KR laser diffraction system with the R7 lens (Sympatec Inc., Clausthal, Germany) that was capable of detecting droplets in a range from 18 to 3750 µm. The spray plume was traversed through the laser beam by means of a linear actuator and the laser was positioned at 30.5 cm (12 inches) downwind of the nozzle tip. The spray is control by a DeVries Manufacturing (Hollandale, MN) Generation II Research Sprayer. All measurements were replicated to provide three measurements per treatment. Ambient temperature (±1°C) and relatively humidity (±3%) were continuously monitored and recorded. The air velocity in the tunnel was monitored in a plane just downwind of the nozzle body with a hot-wire anemometer. Readings (±0.2 m/s) were taken for 30 seconds (the acquisition frequency was 0.8 seconds) at the centerline and at 80% of the distance from the center-line to the walls to the left, right, above and below the centerline.

Concentrated GF-3335 was diluted to a concentration of 1.2% v/v by adding a measured volume to the appropriate volume of UNL:WCREC tap water. Concentrated GF-2726 was diluted to a concentration of 2.8% v/v by adding a measured volume to the appropriate volume of UNL:WCREC tap water. Selected specifications for test substances were provided in **Table 2.**

Table 2. Selected Specification of GF-2726 and GF -3335 Formulations

Formulation Code	GF-2726	GF-3335
Lot #	2C01163R01	ENBK-150225-013
Test Substance #	TSN306327	TSN309389
Composition	281 g/L 2,4-D choline salt 253 g/L glyphosate dimethylammonium salt	456 g a.e./L 2,4-D choline salt
Density	1.1671 g/mL @ 20°C	1.1958 g/mL @ 20°C
Certification date	February 6, 2014	March 2, 2015

Fifty commercially-available nozzles/orifice sizes were tested, each over a range of operating pressures **(Table 3)**. Each tested nozzle was randomly selected from a lot of ten. All nozzles were tested at 40 psi using 1.2% v/v GF-3335; however, higher pressures were tested to find the maximum pressure that would produce statistically equivalent or less percent of driftable fines (≤141 µm) as well as percent of AGDISP deposition fractions at a distance of 30 ft with GF-2726 sprayed through an AIXR 11004 nozzle at 40 psi.

As a confirmation of nozzle performance, each of the tested nozzles was checked for nominal flow rate measured for each pressure tested by collecting duplicate 15-second volumes into a graduated cylinder. The collected volumes (mL) were averaged and converted to liters per

minute and gallons per minute for comparison to the nozzle specifications. Results can be found in the Table 7, pages 31-34 of MRID 49633308.

Table 3. Specifications of Tested Nozzles and Operating Pressure

Manufacturer	Nozzle Design	Model	Operating Pressure (psi)	Catalog Classification
Albuz	AVI	110025	40	Very Coarse
			50	Very Coarse
		11003	40	Extremely Coarse
			50	Very Coarse
			80[A]	---
		11004	40	Extremely Coarse
			90	Very Coarse
		11005	40	Extremely Coarse
			90	Very Coarse
		11006	40	Extremely Coarse
			90	Very Coarse
Greenleaf Technologies	TurboDrop XL (TDXL)	11003	40	Very Coarse
			55	Coarse
			80[A]	---
		11004	40	Very Coarse
			60	Coarse
			70	---
			80[A]	---
		11006	40	Extremely Coarse
			90	Coarse
		11008	40	Extremely Coarse
			90	Coarse
	TurboDrop (TDXL-D)	11002	40	Extremely Coarse
			70	Very Coarse
			80[A]	---
			90[A]	---
		110025	40	Extremely Coarse
			70	Very Coarse
			9[A]	---
		11003	40	Ultra Coarse
			90	Very Coarse
		11004	40	Ultra Coarse
			90	Very Coarse
		11006	40	Ultra Coarse
			100	Ultra Coarse
		11008	40	Ultra Coarse
			80	Ultra Coarse
	TurboDrop DF-D	TADF025-D	40	Extremely Coarse
			80[A]	---
			90	Very Coarse
		TADF03-D	40	Ultra Coarse
			90	Very Coarse
		TADF04-D	40	Ultra Coarse
			90	Very Coarse
		TADF05-D	40	Ultra Coarse
			90	Very Coarse

Table 3. Specifications of Tested Nozzles and Operating Pressure				
Manufacturer	**Nozzle Design**	**Model**	**Operating Pressure (psi)**	**Catalog Classification**
		TADF06-D	40	Ultra Coarse
			90	Extremely Coarse
Hypro	Ultra Low Drift (ULD)	12004	40	Ultra Coarse
			70	Extremely Coarse
			80[A]	---
		12005	40	Extremely Coarse
			50[A]	---
			70	Very Coarse
		12006	40	Extremely Coarse
			60[A]	
			65	Very Coarse
Lechler, Inc.	ID Air Induction (ID)	11003	40	Very Coarse
			60	Very Coarse
		11004	40	Very Coarse
			60	Very Coarse
			80[A]	---
		11005	40	Extremely Coarse
			60	Very Coarse
		11006	40	Extremely Coarse
			60	Extremely Coarse
TeeJet Technologies	Air Induction (AI)	11002	40	Extremely Coarse
			60	Very Coarse
			70[A]	---
		11025	40	Extremely Coarse
			60	Extremely Coarse
			70[A]	---
		11003	40	Extremely Coarse
			60	Extremely Coarse
			70[A]	---
		11004	40	Extremely Coarse
			60	Extremely Coarse
			80[A]	---
		11005	40	Extremely Coarse
			60	Extremely Coarse
			80[A]	---
		11006	40	Ultra Coarse
			70	Extremely Coarse
			80[A]	---
		11008	40	Ultra Coarse
			70	Extremely Coarse
	Air Induction Extended Range (AIXR)	11004	40	Extremely Coarse
			50[A]	---
			60	Very Coarse
		11005	40	Extremely Coarse
			60	Very Coarse
		11006	40	Extremely Coarse
			60	Very Coarse
	Air Induction Turbo Twinjet (AITTJ)	11004	40	Very Coarse
			50	Very Coarse
		11006	40	Extremely Coarse

Table 3. Specifications of Tested Nozzles and Operating Pressure				
Manufacturer	**Nozzle Design**	**Model**	**Operating Pressure (psi)**	**Catalog Classification**
			60	Very Coarse
	Turbo Tee Air Induction (TTI)	11002	40	Ultra Coarse
			70	Extremely Coarse
		110025	40	Ultra Coarse
			70	Extremely Coarse
		11003	40	Ultra Coarse
			70	Extremely Coarse
		11004	40	Ultra Coarse
			80[B]	Extremely Coarse
		11005	40	Ultra Coarse
			80[B]	Extremely Coarse
		11006	40	Ultra Coarse
			80[B]	Extremely Coarse
Wilger Industries, Ltd.	Combi-Jet MR	11006	40	Extremely Coarse
			60	Very Coarse
		11108	40	Extremely Coarse
			50[A]	---
			70	Very Coarse
		11010	40	Extremely Coarse
			50[A]	---
			70	Very Coarse
		110015	40	Extremely Coarse
			70	Very Coarse
		110020	40	Extremely Coarse
			70	Very Coarse

[A] Nozzle and pressure combination were not listed as test nozzles with cited pressure in the Table 1 of MRID 4963308

[B] Listed pressure of nozzle in the Table 1 of MRID 4963308 were higher than the actual pressure used to test the nozzle. Tested pressure are cited in this Table

Statistical Analysis

Statistical analyses were performed by comparing means (3 replications) of volume percent fines by a Dunnett's test, cited in the SAS Manual (SAS Institute Inc, 2012) with the control being the mean from the AIXR11004 nozzle at 40 psi. In order for the Dunnett's test to be consider reliable, a test of the unequal variances was used, employing a Levene's test (SAS Institute Inc, 2012). In some cases, the variances were found to be statistically equal, which led to the exclusion of some tests (sets exhibiting abnormally high or low standard deviations) until the unequal variance test was satisfied. These excluded tests were not included in the mean comparisons and thus could not be classified as to their compatibility of the standard. Statistical tests were performed in the SAS JMP Pro software (SAS Institute, Inc., Cary, NC).

If the tested mean was equivalent or significantly less than the control (i.e. nozzle AIXR 11004 @ 40 psi with GF-2726), it was classified meeting the standard. Means statistically greater than the control were classified as not meeting the standard. Student t-test assuming unequal variance was also used by the reviewer to confirm the reported t-test results submitted in the report.

AGDISP Modeling Procedure

Deposition profiles for each tested nozzle and pressure combination were generated using AGDISP (v8.26) model. The key inputs of AGDISP model were included in **Appendix B** of the submitted study. All inputs, except for the droplet spectra and operating pressure, were kept constant for all of the simulations. Deposition fractions at a distance of 30 ft were provided in **Tables B-2 to B3 in the Appendix B** of the submitted study.

The output data sets from AGDISP were read into R (R Foundation for Statistical Computing, Vienna, Austria). The function interpSpline from library (splines) was used to interpolate the 30 ft. estimated deposition of the sample using a spline function fit to the data. After calculating the 30 ft. values for each replicate of the Enlist Duo alone and the tested system with GF-3335, a one-sided upper bound t-test (significance level = 0.1) was conducted to determine if the estimated mean deposition of the tested system was statistically higher than GF-2726 alone at 30 ft. As defined, a *p*-value less than 0.1 indicates statistical significance. The function t.test from library (stats) was used to perform Welch's t-test assuming unequal variances. Student t-test assuming unequal variance was also used by the reviewer to confirm reported results in the submitted study

C. QUALITY CONTROL FOR SAMPLING

To measure the reproducibility of the test system over the duration of the testing, nozzles specified by ANSI/ASAE Standard S572.1 (1; 13) (reference nozzles) were tested with water sprays. Droplet size spectra of these standard nozzles were performed at the beginning of each testing day, as well as at the conclusion of testing. Test data was processed to give Dv0.1, Dv0.5 and Dv0.9 (Descriptors in **Table 4)** for comparison across treatment sets. Standard nozzles were consistent over three days of testing period (Tables 4 and 5, Page 27 of MRID 49633308). The standard deviations of the DSD averaged 1.86% of the means of six reference nozzles (very fine to fine, fine to medium, medium to coarse, coarse to very coarse, very coarse to extremely coarse and extremely coarse to ultra-coarse), with a maximum variability of 5.4%, suggesting that minimal deviation occurred during the course of the study. However, the standard deviations for the cumulative volume fractions ≤141µm averaged 5.94% of the means of six reference nozzles, with a maximum variability of 15.68 % for coarse/very coarse ASABE reference nozzle during the course of the study.

Table 4. The following descriptors were used to indicate the droplet size for each treatment.

Droplet Size	Description
Dv0.1	10% of the volume of the spray is contained in droplets smaller than this diameter
Dv0.5	50% of the volume of the spray is contained in droplets smaller than this diameter. (This value is commonly called the Volume Median Diameter (VMD)
Dv0.9	90% of the volume of the spray is contained in droplets smaller than this diameter

Results with the S572.1 standard nozzle set with water and the AIXR 11004 with GF-2726 was also consistent over the three days of testing periods (Tables 4 and 5, page 27 in MRID 49633308). The standard deviations of the Dv0.5 averaged 1.4% of the means over the course of the study.

Although this study was not carried out in under FIFRA GLP standards, the work was performed following the appropriate quality control, personnel, auditing and archiving procedures that have been implemented at the UNL:WCREC wind tunnel facility. A copy of the "UNL-WCREC Standard Operating Procedures" (SOP UNL 1.4) was provided in **Appendix A** of the submitted study.

In keeping with the principles of the Generic Verification Protocol for Testing Pesticide Application, compliance with Data Quality Indicator Goals (DQIG) for Spray Droplet Size Measurements (EPA 2014)) was documented as shown in **Appendix B** of the submitted study. The meeting of the DQIG for Spray Droplet Size Measurements, listed in Table 2 of (EPA 2014), is also noted in **Appendix B** of the submitted study.

Raw data worksheets, logged environmental data, electronic data files and statistical analysis of this study are archived in the archive facility of Dow AgroSciences LLC, 9330 Zionsville Road, Indianapolis, IN, USA.

D. RESULTS AND DISCUSSION

Air Speed

The measured airspeed at the centerline was 16.1 miles per hour (mph), slightly higher than the nominal speed of 15 mph. Measurements taken over the off-center points over the face of the tunnel showed a range of airspeeds from 15.8 to 16.4 mph, indicating a reduction in speed away from the centerline of about 4%, within the acceptable range of 10% stated in SOP UNL 1.4. The mean measured airspeed at the four off-center points was 16.1 mph, with a maximum variation of < 1%, indicating that consistent flow was present in the working section of the wind tunnel.

Measurement of Percent of Fines (≤141 µm) Fraction

The complete graphical data set and a tabular summary of the entire spray output distribution for each of the spray nozzle and pressure combinations, with statistical analysis of replicates, can be obtained from the submitted study reports (MRIDs 4933308 and Havens, 2016). An example of graphical representation of droplet size spectrum of AVI11004 at 40 psi were included in **Appendix A**. Data was collected over three testing days in the University of Nebraska wind tunnel. Because environmental conditions can change over time, the baseline droplet spectra produced with a 2.8% v/v solution of GF-2726 (Enlist Duo), sprayed through a TeeJet AIXR11004 nozzle operated at 40 psi, was measured each testing day. Solutions of GF-3335 (1.2%) were tested with 50 nozzles, operating across a range of operating pressures. The % of fine droplets, defined as cumulative volume fraction at a 141 µm droplet size for each of the spray nozzle and pressure combinations can be obtained from the supplemental information of MRID 4963308 (Havens, 2016). The means of each treatment were compared to the mean of the daily baseline (*i.e.* AIXR 11004 @ 40 psi with GF-2726) using the Dunnett's method, at an α level of 0.1. Statistical results with "**not different**" and "**lower fines**" are considered acceptable nozzles that have potential to reduced driftable fines. Detailed results for each of the spray nozzle

and pressure combinations, with statistical analysis of replicates were provided in **Tables A-1 to A-3** in **Appendix A.**

In conjunction with lower or equal cumulative volume fraction of ≤ 141μm as an acceptable criterion, to be deemed acceptable nozzle, 30 ft AGDISP estimated deposition fractions or the proposed nozzle/orifice/pressure with GF-3335 must not be statistically greater than the mean estimated deposition fraction for GF-2726 sprayed through an AIXR 11004 at 40 psi. After calculating the 30 ft values for each replicate of the GF-2726 alone and the nozzle/pressure with GF-3335, a one-sided upper bound t-test (significance level α of 0.1) was conducted to determine if the estimated mean deposition fraction of the proposed nozzle/orifice/pressure with GF-3335 was statistically equivalent or less than the mean 30 ft estimated deposition for Enlist Duo sprayed through an AIXR 11004 at 40 psi. **Table B-2 (Appendix B)** provides if this specification was met. If the estimated deposition fraction at 30 ft for the proposed nozzle/orifice/pressure with GF-3335 is statistically greater than the mean 30 ft estimated deposition fraction for GF-2726 sprayed through an AIXR 11004 at 40 psi, then it did not met the acceptable criterion for GF-3335 formulation. **Table 5** provides whether % of ≤141 μm and the deposition fractions at 30 ft from AGDISP modeling were met the acceptability criteria for tested nozzle/pressure combinations for GF-3335. A total of 99 nozzle/pressure combinations were found to be compatible to baseline (i.e. nozzle AIXR 11004 @ 40 psi with GF-2726).

Table 5. Fulfillment of Acceptability Criteria of Selected Nozzles for GF-3335 formulation of 2,4-D choline

Manufacturer	Nozzle Design	Model	Operating Pressure (psi)	Criteria Requirement for Acceptable Nozzles	
				Percent of Driftable Fines (≤141μm) Exceeded the Baseline[A]	≤ Fraction of AGDISP Model Deposition @ 30 ft Exceeded the Baseline[B]
Albuz	AVI	110025	40	No	No
			50	No	No
			60	No	No
		11003	40	No	No
			50	No	No
			80	No	No
		11004	40	No	No
			90	No	No
		11005	40	No	No
			90	No	No
		11006	40	No	No
			90	No	No
Greenleaf Technologies	TurboDrop XL (TDXL)	11003	40	No	No
			55	No	No
			80	Yes	Yes
		11004	40	No	No
			60	No	No
			70	No	No
			80	No	No

Table 5. Fulfillment of Acceptability Criteria of Selected Nozzles for GF-3335 formulation of 2,4-D choline					
Manufacturer	**Nozzle Design**	**Model**	**Operating Pressure (psi)**	**Criteria Requirement for Acceptable Nozzles**	
				Percent of Driftable Fines (≤141µm) Exceeded the Baseline[A]	**≤ Fraction of AGDISP Model Deposition @ 30 ft Exceeded the Baseline[B]**
		11006	40	No	No
			90	No	No
		11008	40	No	No
			90	No	No
	TurboDrop (TDXL-D)	11002	40	No	No
			70	No	No
			80	No	No
			90	No	No
		110025	40	No	No
			70	No	No
			90	No	No
		11003	40	No	No
			90	No	No
		11004	40	No	No
			90	No	No
		11006	40	No	No
			100	No	No
		11008	40	No	No
			80	No	No
	TurboDrop DF-D	TADF025-D	40	No	No
			80	No	No
			90	Yes	Yes
		TADF03-D	40	No	No
			90	No	No
		TADF04-D	40	No	No
			90	No	No
		TADF05-D	40	No	No
			90	No	No
		TADF06-D	40	No	No
			90	No	No
Hypro	Ultra Low Drift (ULD)	12004	40	No	No
			70	No	No
			80	No	No
		12005	40	No	No
			50	No	No
			70	Yes	Yes
		12006	40	No	No
			60	No	No
			65	Yes	Yes
Lechler, Inc.	ID Air Induction (ID)	11003	40	No	No
			60	No	No
		11004	40	No	No

Table 5. Fulfillment of Acceptability Criteria of Selected Nozzles for GF-3335 formulation of 2,4-D choline					
Manufacturer	**Nozzle Design**	**Model**	**Operating Pressure (psi)**	**Criteria Requirement for Acceptable Nozzles**	
				Percent of Driftable Fines (≤141µm) Exceeded the Baseline[A]	**≤ Fraction of AGDISP Model Deposition @ 30 ft Exceeded the Baseline[B]**
			60	No	No
			80	No	No
		11005	40	No	No
			60	No	No
		11006	40	No	Not Reported
			60	No	Not Reported
TeeJet Techlogies	Air Induction (AI)	11002	40	No	No
			60	No	No
			70	No	No
		11025	40	No	No
			60	No	No
			70	No	No
		11003	40	No	No
			60	No	No
			70	No	No
		11004	40	No	No
			60	No	No
			80	No	No
		11005	40	No	No
			60	No	No
			80	No	No
		11006	40	No	No
			70	No	No
			80	No	No
		11008	40	No	No
			70	No	No
	Air Induction Extended Range (AIXR)	11004	40	No	No
			50	Yes	Yes
			60	Yes	Yes
		11005	40	No	No
			50	No	No
			60	Yes	Yes
		11006	40	No	No
			60	Yes	Yes
	Air Induction Turbo Twinjet (AITTJ)	11004	40	No	No
			50	Yes	Yes
		11006	40	No	No
			60	Yes	Yes
	Turbo Tee Air Induction (TTI)	11002	40	No	No
			70	No	No
		110025	40	No	No
			70	No	No

Table 5. Fulfillment of Acceptability Criteria of Selected Nozzles for GF-3335 formulation of 2,4-D choline

Manufacturer	Nozzle Design	Model	Operating Pressure (psi)	Criteria Requirement for Acceptable Nozzles	
				Percent of Driftable Fines (≤141µm) Exceeded the Baseline[A]	≤ Fraction of AGDISP Model Deposition @ 30 ft Exceeded the Baseline[B]
		11003	40	No	No
			70	No	No
		11004	40	No	No
			80	Yes	No
		11005	40	No	No
			80	Yes	No
		11006	40	No	No
			80	Yes	Yes
Wilger Industries, Ltd.	Combi-Jet MR	11006	40	No	No
			50	No	No
			60	Yes	Yes
		11108	40	No	No
			50	No	No
			70	Yes	Yes
		11010	40	No	No
			50	Yes	Yes
			70	Yes	Yes
		110015	40	NA	NA
			70	Not Reported	Not Reported
		110020	40	Not Reported	Not Reported
			70	Not Reported	Not Reported

[A] Driftable fines ((≤141µm) of AIXR 11004 Nozzle @ 40psi with GF-2726

[B]AGDISP deposition fraction @ 30 ft generated from drop size distribution of AIXR 11004 Nozzle @ 40psi with GF-2726.

E. ACCEPTABILITY/DEFICIENCIES/CLARIFICATIONS

Analytical data for tested nozzles were submitted, so reviewers were able to confirm the reported drop size distribution and statistical analysis. This study is classified as acceptable, with no major deficiencies. But some sections of the study were not readily transparent and several errors were observed in the submitted study. The following inconsistencies were noted.

- Some of the tested nozzle and pressure combination were not listed as test nozzle/pressure combinations in the Table 1 of MRID 49633308.

- The pressure used in testing nozzle is not reported in graphical outputs of Sympatec Helos laser diffraction particle size analyzer. However, reviewer was able to get that information from a table in page 80, which serves as an index.

- The report is inconsistent in some areas of data reporting. For example, listed pressures for some nozzles Table 1 were higher than the actual pressure used to test the nozzle (e.g. TTI11004 @ 90 psi but the test was performed at 80 psi.

E. CONCLUSIONS

A wind tunnel study was conducted to evaluate droplet size spectra for GF-3335 using 50 nozzles representing a wide range of design from several manufactures. Forty eight of 50 tested nozzles, operated within their rated pressure ranges, yielded % fines measurements equal to or less than the field-tested standard nozzle AIXR 11004 with GF-2726 operated at 40 psi. Additional AGDISP deposition fractions at 30 ft also confirmed these results for the majority of tested nozzles. A total of 101 nozzle/pressure combinations were found to be compatible to nozzle AIXR 11004 @ 40 psi.

F. REFERENCES

ASABE. (2012). ANSI/ASAE S572.1 MAR2009 Spray Nozzle Classification by Droplet Spectra. St. Joseph, MI: American Society of Agricultural and Biological Engineers.

ASTM. (2012). ASTM Standard E2798-11: Standard Test Method for Characterization of Performance of Pesticide Spray Drift Reduction Adjuvants for Ground Application. West Conshocken, PA: ASTM International.

Fritz, B. K., Hoffmann, W. C., Birchfield, N. B., Ellenberger, J., Khan, F., Bagley, W., Hewitt, A. (2010). Evaluation of Spray Drift Using Low-Speed Wind Tunnel Measurements and Dispersion Modeling. *Journal of ASTM International, 7*(6). doi: 10.1520/JAI102775.

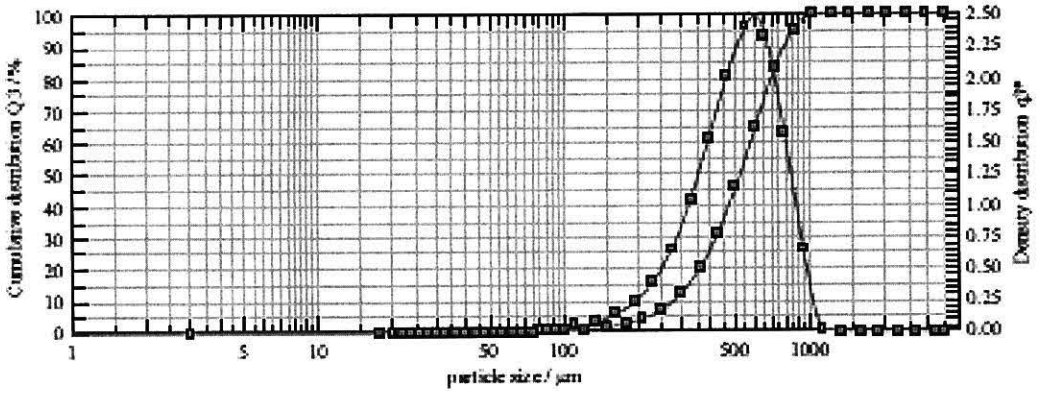
Havens, P.L. 2016. P.L. Supplemental Information for MRID 49633308 - Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335. Unpublished study performed (Study # 160687), submitted by the Dow AgroSciences LLC, Indianapolis, IN 46268. Experiment initiation 04/18/2016 and completion 04/22/2016 (p. 4).

ISO. (2008). Standard 22856: Equipment for crop protection, methods for laboratory measurement of spray drift - Wind tunnels. Geneva, Switzerland: International Standards Organization.

USEPA. (2014). U.S. EPA Generic Verification Protocol for the Testing Pesticide Spray Drift Reduction Technologies for Row and Field Crops (Final ed.). Washington, DC.

Appendix A.

Example of Sympatec Laser particle Size Analyzer Reports for AV1110025 @40 psi for GF-3335



cumulative distribution

x_i/µm	Q_3/%	x_i/µm	Q_3/%	x_i/µm	Q_3/%	x_i/µm	Q_3/%
18.00	0.00	74.00	0.00	300.00	11.89	1220.00	100.00
22.00	0.00	86.00	0.07	360.00	20.16	1460.00	100.00
26.00	0.00	100.00	0.22	420.00	30.38	1740.00	100.00
30.00	0.00	120.00	0.53	500.00	45.83	2060.00	100.00
36.00	0.00	150.00	1.23	600.00	64.65	2460.00	100.00
44.00	0.00	180.00	2.32	720.00	83.12	2940.00	100.00
52.00	0.00	210.00	3.89	860.00	95.15	3500.00	100.00
62.00	0.00	250.00	6.80	1020.00	99.90		

density distribution (log.)

x_m/µm	q_3/g	x_m/µm	q_3/g	x_m/µm	q_3/g	x_m/µm	q_3/g
3.00	0.00	87.73	0.00	273.86	0.64	1115.53	0.01
19.90	0.00	79.77	0.01	328.63	1.04	1334.82	0.00
23.92	0.00	92.74	0.02	388.84	1.53	1593.86	0.00
27.93	0.00	109.54	0.04	458.26	2.01	1893.25	0.00
32.86	0.00	134.16	0.07	547.72	2.40	2251.13	0.00
39.80	0.00	164.32	0.14	657.27	2.33	2689.31	0.00
47.83	0.00	194.42	0.23	786.89	1.56	3207.80	0.00
56.78	0.00	229.13	0.38	936.59	0.64		

evaluation: WINDOX 5.7.0.0, FREE
revalidation:
reference measurement: 03-16 11:05:20
contamination: 0.00 %

product: 2015 Dow
density: 2.7100 g/cm³, shape factor: 1.000
disp. meth.: Sympatec
C_{opt}= 2.73 %

trigger condition: 17 Seconds
start: Ch.10 >= 0.1%
valid: 0% <= Ch.10 <= 90%
stop: 0.2s ch.10 <= 0.1% or 17s real time
time base: 100.0 ms

user parameters:
Solution: GF-3335
nozzle: AV1110025
Nor Orientation: Standard
Orifice: .025
Miscellaneous:

SYMPATEC
Sympatec GmbH
System-Partikel-Technik

Table A-1. Mean, Standard Deviation, *p*-Value for Each Nozzle at Various Pressure

Testing day 16-March-2015							
		pressure,	#	% < 141 um			
solution	nozzle	psi	replicates	Mean	Std Dev	*p*-value[A]	result
GF-2726	**AIXR11004**	**40**	**6**	**1.73**	**0.060332**	-	**baseline for 3/16/2105**
GF-3335	AI11002	40	3	0.58	0.088882	<0.0001*	lower fines
GF-3335	AI11002	60	3	1.15667	0.020817	<0.0001*	lower fines
GF-3335	AI11002	70	3	1.59667	0.133167	0.5074	not different
GF-3335	AI110025	40	3	0.56	0.017321	<0.0001*	lower fines
GF-3335	AI110025	60	3	1.07667	0.005774	<0.0001*	lower fines
GF-3335	AI110025	70	3	1.3	0.06245	<0.0001*	lower fines
GF-3335	AI11003	40	3	0.50333	0.005774	<0.0001*	lower fines
GF-3335	AI11003	60	3	0.94667	0.011547	<0.0001*	lower fines
GF-3335	AI11003	70	3	1.15333	0.015275	<0.0001*	lower fines
GF-3335	AI11004	40	3	0.6	0.060828	<0.0001*	lower fines
GF-3335	AI11004	60	3	1.03667	0.015275	<0.0001*	lower fines
GF-3335	AI11004	80	3	1.62333	0.005774	0.8997	not different
GF-3335	AI11005	40	3	0.49667	0.005774	<0.0001*	lower fines
GF-3335	AI11005	60	3	0.97	0.03	<0.0001*	lower fines
GF-3335	AI11005	80	3	1.47	0.04	0.0003*	lower fines
GF-3335	AI11006	40	3	0.40333	0.032146	<0.0001*	lower fines
GF-3335	AI11006	70	3	1.1	0.04	<0.0001*	lower fines
GF-3335	AI11006	80	3	1.17667	0.032146	<0.0001*	lower fines
GF-3335	AI11008	40	3	0.39667	0.020817	<0.0001*	lower fines
GF-3335	AI11008	70	3	0.99333	0.011547	<0.0001*	lower fines
GF-3335	AITTJ11004	40	3	1.65	0.115326	0.9993	not different
GF-3335	AITTJ11004	50	3	2.54667	0.041633	<0.0001*	higher fines
GF-3335	AITTJ11006	40	3	1.16667	0.005774	<0.0001*	lower fines
GF-3335	AITTJ11006	60	3	2.42333	0.041633	<0.0001*	higher fines
GF-3335	AIXR11004	40	3	1.43667	0.015275	<0.0001*	lower fines
GF-3335	AIXR11004	50	3	1.79333	0.015275	***0.06[B]***	***higher fine***
GF-3335	AIXR11004	60	3	2.45	0.04	<0.0001*	higher fines
GF-3335	AIXR11005	40	3	1.32667	0.056862	<0.0001*	lower fines
GF-3335	AIXR11005	50	3	1.73333	0.028868	1	not different
GF-3335	AIXR11005	60	3	2.34333	0.030551	<0.0001*	higher fines
GF-3335	AIXR11006	40	3	1.17667	0.020817	<0.0001*	lower fines
GF-3335	AIXR11006	60	3	2.17667	0.085049	<0.0001*	higher fines
GF-3335	AVI110025	40	4	0.655	0.092556	<0.0001*	lower fines
GF-3335	AVI110025	50	3	1.02667	0.020817	<0.0001*	lower fines
GF-3335	AVI11003	40	3	0.52333	0.011547	<0.0001*	lower fines
GF-3335	AVI11003	50	3	0.76	0.017321	<0.0001*	lower fines

Testing day 16-March-2015							
				% < 141 um			
solution	nozzle	pressure, psi	# replicates	Mean	Std Dev	*p*-value[A]	result
GF-3335	AVI11004	40	3	0.50333	0.005774	<0.0001*	lower fines
GF-3335	AVI11004	90	3	1.48333	0.028868	0.0008*	lower fines
GF-3335	AVI11005	40	3	0.6	0.060828	<0.0001*	lower fines
GF-3335	AVI11005	90	3	1.60667	0.015275	0.6689	not different
GF-3335	AVI11006	40	3	0.70333	0.015275	<0.0001*	lower fines
GF-3335	AVI11006	90	3	1.59333	0.020817	0.4562	not different
GF-3335	ID11003	40	3	0.49	0.01	<0.0001*	lower fines
GF-3335	ID11003	60	3	0.97333	0.011547	<0.0001*	lower fines
GF-3335	ID11004	60	3	0.84	0.017321	<0.0001*	lower fines
GF-3335	TADF025-D	40	3	0.39667	0.045092	<0.0001*	lower fines
GF-3335	TADF025-D	90	3	2.02667	0.240069	<0.0001*	higher fines
GF-3335	TADF03-D	40	3	0.32	0.01	<0.0001*	lower fines
GF-3335	TADF03-D	90	3	1.18667	0.005774	<0.0001*	lower fines
GF-3335	TADF04-D	40	3	0.28667	0.005774	<0.0001*	lower fines
GF-3335	TADF04-D	90	3	1.21667	0.005774	<0.0001*	lower fines
GF-3335	TADF05-D	40	3	0.35667	0.005774	<0.0001*	lower fines
GF-3335	TADF05-D	90	3	1.48667	0.045092	0.0010*	lower fines
GF-3335	TADF06-D	40	3	0.23333	0.032146	<0.0001*	lower fines
GF-3335	TADF06-D	90	3	0.90333	0.09609	<0.0001*	lower fines
GF-3335	TDXL11003	40	5	1.34	0.411764	<0.0001*	lower fines
GF-3335	TDXL11003	55	3	1.19	0.026458	<0.0001*	lower fines
GF-3335	TDXL11004	40	3	0.56333	0.015275	<0.0001*	lower fines
GF-3335	TDXL11004	60	3	1.03667	0.011547	<0.0001*	lower fines
GF-3335	TDXL11006	40	3	0.34333	0.015275	<0.0001*	lower fines
GF-3335	TDXL11006	90	3	1.17333	0.011547	<0.0001*	lower fines
GF-3335	TDXL11008	40	3	0.39333	0.005774	<0.0001*	lower fines
GF-3335	TDXL11008	90	3	1.29	0.026458	<0.0001*	lower fines
GF-3335	TDXLD110025	40	3	0.39333	0.005774	<0.0001*	lower fines
GF-3335	TDXLD110025	70	3	1.08333	0.005774	<0.0001*	lower fines
GF-3335	TDXLD11002	40	3	0.47	0	<0.0001*	lower fines
GF-3335	TDXLD11002	70	3	1.08667	0.011547	<0.0001*	lower fines
GF-3335	TDXLD11003	40	3	0	0	<0.0001*	lower fines
GF-3335	TDXLD11003	90	3	0.75333	0.055076	<0.0001*	lower fines
GF-3335	TDXLD11004	40	3	0.2	3.4E-17	<0.0001*	lower fines
GF-3335	TDXLD11004	90	3	0.71667	0.025166	<0.0001*	lower fines
GF-3335	TDXLD11006	40	4	0.0975	0.049244	<0.0001*	lower fines
GF-3335	TDXLD11006	100	3	0.39	0.01	<0.0001*	lower fines
GF-3335	TDXLD11008	40	3	0	0	<0.0001*	lower fines

Testing day 16-March-2015							
solution	nozzle	pressure, psi	# replicates	% < 141 um Mean	% < 141 um Std Dev	*p*-value[A]	result
GF-3335	TDXLD11008	80	3	0.21	0	<0.0001*	lower fines
GF-3335	TTI11002	40	3	0.42667	0.020817	<0.0001*	lower fines
GF-3335	TTI11002	70	3	1.12	0.01	<0.0001*	lower fines
GF-3335	TTI110025	40	3	0.32333	0.020817	<0.0001*	lower fines
GF-3335	TTI110025	70	3	0.82333	0.023094	<0.0001*	lower fines
GF-3335	TTI11003	40	3	0.41333	0.023094	<0.0001*	lower fines
GF-3335	TTI11003	70	3	1.13667	0.076376	<0.0001*	lower fines
GF-3335	TTI11004	40	3	0.43667	0.005774	<0.0001*	lower fines
GF-3335	TTI11004	80	3	1.78	0.03	***0.08[B]***	***higher fine***
GF-3335	TTI11005	40	3	0.50667	0.023094	<0.0001*	lower fines
GF-3335	TTI1100	80	3	1.77667	0.020817	***0.08[B]***	***higher Fine***
GF-3335	TTI11006	40	3	0.71667	0.015275	<0.0001*	lower fines
GF-3335	TTI11006	80	3	2.26	0.138924	<0.0001*	higher fines
GF-3335	ULD12004	40	3	0.50333	0.015275	<0.0001*	lower fines
GF-3335	ULD12004	70	3	1.30667	0.037859	<0.0001*	lower fines
GF-3335	ULD12005	40	3	0.78667	0.023094	<0.0001*	lower fines
GF-3335	ULD12005	70	3	2.30667	0.117189	<0.0001*	higher fines
GF-3335	ULD12006	40	3	0.88333	0.020817	<0.0001*	lower fines
GF-3335	ULD12006	65	3	1.87	0.051962	0.4075	not different

[A] Dunnet's t-test comparison between mean of Driftable fines (≤141 μm) of nozzle/pressure trials and mean of baseline except bolded values

[B]. Student t-test comparison between mean of Driftable fines (≤141 μm) of nozzle/pressure trials and mean of baseline (**bolded**).

Table A-2. Mean, Standard Deviation, *p*-Value for Each Nozzle at Various Pressure

Testing day 17-March-2015							
solution	nozzle	pressure , psi	# replicates	% < 141 um Mean	% < 141 um Std Dev	*p*-value[A]	result
GF-2726	**AIXR11004**	**40**	**3**	**1.71**	**0.043589**	**-**	**baseline for 3/17/2105**
GF-3335	AI11002	80	3	1.72	0.01	1	not different
GF-3335	AI110025	80	3	1.68667	0.141892	1	not different
GF-3335	AI11003	80	3	1.37333	0.118462	<0.0001*	lower fines
GF-3335	AI11008	80	3	1.18333	0.040415	<0.0001*	lower fines
GF-3335	AVI110025	60	3	1.15667	0.025166	<0.0001*	lower fines
GF-3335	AVI11003	80	3	1.40667	0.092916	<0.0001*	lower fines
GF-3335	ID11004	40	3	0.48	0.017321	<0.0001*	lower fines
GF-3335	ID11004	80	3	1.43333	0.020817	<0.0001*	lower fines
GF-3335	ID11005	40	3	0.52	0.04	<0.0001*	lower fines
GF-3335	ID11005	60	3	0.94	0.026458	<0.0001*	lower fines

Testing day 17-March-2015							
				% < 141 um			
solution	nozzle	pressure, psi	# replicates	Mean	Std Dev	*p*-value[A]	result
GF-3335	MR11006	40	3	0.90667	0.015275	<0.0001*	lower fines
GF-3335	MR11006	60	3	2.1	0.01	<0.0001*	higher fines
GF-3335	MR11008	40	3	0.83	0.017321	<0.0001*	lower fines
GF-3335	MR11008	70	3	2.04333	0.005774	<0.0001*	higher fines
GF-3335	MR11010	40	3	1.47	0.045826	<0.0001*	lower fines
GF-3335	MR11010	70	3	3.41333	0.170098	<0.0001*	higher fines
GF-3335	TADF025-D	80	3	1.29	0.036056	<0.0001*	lower fines
GF-3335	TDXL11003	80	3	2.02333	0.041633	<0.0001*	higher fines
GF-3335	TDXL11004	80	3	1.71	0.052915	1	not different
GF-3335	TDXL-D11002	90	3	1.71333	0.037859	1	not different
GF-3335	TDXL- D110025	90	3	1.46333	0.011547	<0.0001*	lower fines
GF-3335	TTI11002	80	3	1.25667	0.020817	<0.0001*	lower fines
GF-3335	TTI110025	80	3	1.04667	0.028868	<0.0001*	lower fines
GF-3335	TTI11003	80	3	1.24333	0.011547	<0.0001*	lower fines
GF-3335	TTI11005	70	3	1.52333	0.040415	0.0031	not different
GF-3335	TTI11006	60	3	1.57667	0.015275	0.0806	not different
GF-3335	ULD120-04	80	3	1.65667	0.005774	0.9809	not different
GF-3335	ULD12005	50	3	0.96333	0.023094	<0.0001*	lower fines
GF-3335	ULD120-06	60	3	1.67333	0.035119	0.9999	not different

[A] Dunnet's t-test comparison between mean of Driftable fines (≤141 µm) of nozzle/pressure trials and mean of baseline except bolded values

Table A-3. Mean, Standard Deviation, *p*-Value for Each Nozzle at Various Pressure

Testing day 18-March-2015							
				% < 141 um			
solution	nozzle	pressure, psi	# replicates	Mean	Std Dev	p-value[A]	result
GF-2726	**AIXR11004**	**40**	**3**	**1.54333**	**0.060277**	**-**	**baseline for 3/18/2105**
GF-3335	MR11006	50	3	1.22333	0.030551	<0.0001*	lower fines
GF-3335	MR11008	50	3	1.23667	0.032146	0.0001*	lower fines
GF-3335	MR11010	50	3	1.83333	0.090738	0.0002*	higher fines
GF-3335	TDXL11004	70	3	1.35333	0.068069	0.0067*	lower fines
GF-3335	TDXL-D11002	80	3	1.05667	0.037859	<0.0001*	lower fines

[A] Dunnet's t-test comparison between mean of Driftable fines (≤141 µm) of nozzle/pressure trials and mean of baseline except bolded values

Appendix B

Table B-1. Selected input parameter of AGDISP Modeling		
Parameter	Value	comments
Application method section		
Method	Ground	
Nozzle type	Flat fan	Although many of the nozzles tested are of the air induction type, the direct use of the DSD overrides the use of "air induction" as the nozzle type. If air induction were chosen, the adjustment of the spectrum by the model would "double count" the air induction effect
Boom pressure	Set to each tested value	Has effect on the driving speed of the application, so will change the deposition.
Release height	3 ft	Default
Spray lines	20	Default
Meteorology section		
Wind type	Single height	Default
Wind speed	15 mph	Under bound from label
Wind direction	-90 deg	Worst-case and default
Temperature	65 F	Default
Relative humidity	50%	Default
Surface section		
Angles	0	Default
Canopy	None	Default
Surface roughness	0.12 ft	Mean of "crops" cover type
Application technique section		
Nozzles	54, even spacing	Standard boom setup
DSD	From wind tunnel results, imported in library	
Atmospheric stability	Strong	Default
Swath section		
Swath width	90 ft	Standard boom
Swath displacement	0 ft	Worst-case
Spray material section		
Spray volume rate	15 gal/acre	From Enlist Duo label
Volatile/nonvolatile fraction	Enlist Duo at 2.8% v/v GF-3335 at 1.2% v/v	See calculation below[A] See calculation below[B]

[A] The tested mixture was 2.8% (v/v) Enlist Duo in water. Enlist Duo has a density of 1.171 kg/L and contains 24.42 % (w/w) of 2,4-D choline salt (16.65% (w/w) 2,4-D acid equivalent) and 22.17% (w/w) glyphosate dimethylammonium salt.

Table B-1. Selected input parameter of AGDISP Modeling
For example, a 100-liter batch would contain the following: Enlist Duo 2.8% * 100 L = 2.8L; 2.8L * 1.171 kg/L = 3.279 kg Water: 100 -2.8 L = 97.2 L = 97.2 kg Total weight: 3.279+97.2 = 100.497 kg Active ingredient fraction: 3.279 kg * 16.65 % (a.e.) = 0.546 kg; 0.546 kg/100.497 kg = **0.0054** (dimensionless) Non-volatile fraction: 3.279 kg* (24.42 % + 22.17%) = 1.528 kg; 1.528 kg/100.497 kg = **0.0152** (dimensionless)
[B] The tested mixture was 1.2% (v/v) GF-3335 in water. GF-3335 has a density of 1.1958 kg/L and contains 55.7 % (w/w) of 2,4-D choline salt (38% (w/w) 2,4-D acid equivalent. For example, a 100-liter batch would contain the following: Enlist Duo 1.2% * 100 L = 1.2L; 1.2L * 1.1958 kg/L = 1.435 kg Water: 100 -1.2 L = 98.8 L = 98.8 kg Total weight: 1.435+98.8 = 100.235 kg Active ingredient fraction: 1.435 kg * 38 % (a.e.) = 0.5453 kg; 0.5453 kg/100.235 kg = **0.0054** (dimensionless) Non-volatile fraction: 1.435 kg* (55.7 %) = 0.80765 kg; 1.528 kg/100.235 kg = **0.0081** (dimensionless)

AGDISP Model Sample Input Data Summary

AGDISP Input Data Summary

Title: AI11002-90-1
Notes:

Calculations Done: Yes
Run ID: AGDISP AI11002-80-1.ag 8.26 05-10-2016 15:56:18

--APPLICATION METHOD--		----------
Method		Ground
--Ground Sprayer--		----------
Nozzle Type		Flat Fan
Boom Pressure (psig)		80
--Spray Lines--		----------
Release Height (ft)		3
Spray Lines		20
Optimize Spray Reps		No
Spray Line Reps	#	Reps
	1	1
	2	1
	3	1
	4	1
	5	1
	6	1
	7	1
	8	1
	9	1
	10	1
	11	1
	12	1
	13	1
	14	1
	15	1
	16	1
	17	1
	18	1
	19	1
	20	1

--APPLICATION TECHNIQUE--				----------
Application Technique				Liquid
--Nozzles--				----------
Boom Length (%)				98.34
Nozzle Locations	#	Hor(ft)	Ver(ft)	Fwd(ft)
	1	-44.26	0	0
	2	-42.59	0	0
	3	-40.91	0	0
	4	-39.25	0	0
	5	-37.58	0	0
	6	-35.91	0	0

7	-34.23	0	0
8	-32.57	0	0
9	-30.9	0	0
10	-29.23	0	0
11	-27.56	0	0
12	-25.89	0	0
13	-24.22	0	0
14	-22.55	0	0
15	-20.88	0	0
16	-19.21	0	0
17	-17.54	0	0
18	-15.87	0	0
19	-14.2	0	0
20	-12.53	0	0
21	-10.86	0	0
22	-9.19	0	0
23	-7.51	0	0
24	-5.84	0	0
25	-4.17	0	0
26	-2.5	0	0
27	-0.835	0	0
28	0.835	0	0
29	2.51	0	0
30	4.18	0	0
31	5.85	0	0
32	7.52	0	0
33	9.19	0	0
34	10.86	0	0
35	12.53	0	0
36	14.2	0	0
37	15.87	0	0
38	17.54	0	0
39	19.21	0	0
40	20.88	0	0
41	22.55	0	0
42	24.22	0	0
43	25.89	0	0
44	27.56	0	0
45	29.23	0	0
46	30.9	0	0
47	32.57	0	0
48	34.23	0	0
49	35.91	0	0
50	37.58	0	0
51	39.25	0	0
52	40.91	0	0
53	42.59	0	0
54	44.26	0	0

--Drop Size Distribution--

Name	AI11002-80-1
Type	User-defined

Drop Categories	#	Diam (um)	Frac
	1	18.00	0.0000
	2	22.00	0.0000
	3	26.00	0.0000

4	30.00	0.0000
5	36.00	0.0000
6	44.00	0.0000
7	52.00	0.0000
8	62.00	0.0000
9	74.00	0.0000
10	86.00	0.0013
11	100.00	0.0027
12	120.00	0.0052
13	150.00	0.0115
14	180.00	0.0175
15	210.00	0.0244
16	250.00	0.0440
17	300.00	0.0738
18	360.00	0.1155
19	410.00	0.1382
20	500.00	0.1964
21	600.00	0.2245
22	720.00	0.1191
23	860.00	0.0082
24	1020.00	0.0000
25	1220.00	0.0000
26	1460.00	0.0000
27	1740.00	0.0000
28	2060.00	0.0177
29	2460.00	0.0000
30	2940.00	0.0000
31	3500.00	0.0000

--SWATH--	----------
Swath Width	90 ft
Swath Displacement	0 ft

--METEOROLOGY--	----------
Wind Speed (mph)	15
Wind Direction (deg)	-90
Temperature (deg F)	65
Relative Humidity (%)	50

--SPRAY MATERIAL--	----------
Name	Enlist Herbicide 1.2%
Spray Material Evaporates	Yes
Spray Volume Rate (gal/ac)	15
Active Fraction	0.0055
Nonvolatile Fraction	0.0081
Active Fraction of Tank Mix	0.0055
Fraction of Active Solution that is Nonvolatile	1
Additive Fraction of Tank Mix	0.0041
Fraction of Additive Solution that is Nonvolatile	0.64

--ATMOSPHERIC STABILITY--	----------
Atmospheric Stability	Strong

--SURFACE--	----------
Upslope Angle (deg)	0
Sideslope Angle (deg)	0

--Canopy--	----------
Type	None
Surface Roughness (ft)	0.12
--TRANSPORT--	----------
Flux Plane Distance (ft)	0
--ADVANCED SETTINGS--	----------
Wind Speed Height (ft)	6.56
Max Compute Time (sec)	600
Max Downwind Dist (ft)	2608.24
Vortex Decay Rate (OGE) (mph)	0.3355
Vortex Decay Rate (IGE) (mph)	1.25
Aircraft Drag Coeff	0.1
Propeller Efficiency	0.8
Ambient Pressure (in hg)	29.91
Ground Reference (ft)	0
Save Trajectory Files	No
Half Boom	No
Default Swath Offset	0 Swath
Specific Gravity (Carrier)	1
Specific Gravity (Active/Additive)	1.2
Evaporation Rate (μm^2/deg C/sec)	84.76

Table B-2: Mean, Standard Deviation, and p-Value of AGDISP Model Deposition @ 30 ft for Nozzle and Pressure Combination

testing day	**16-March-2015**							
Baseline Deposition, fraction of applied (AIXR 11004 with GF-2726)	**mean**	**Std Dev**						
	0.021714	**0.000729**						
Nozzle with GF-3335		fractional deposition at 30' downwind						statistical result vs. baseline
		replicate			Mean	Std Dev		
	Pressure	1	2	3			p-value	
AI11002	40	0.007414	0.007961	0.009661	0.008345	0.001171822	0.9997285	less
AI11002	60	0.014887	0.015298	0.014991	0.015059	0.000213426	0.9999998	less
AI11002	70	0.01855	0.021249	0.020325	0.020041	0.001371649	0.9214829	less
AI110025	40	0.007786	0.008162	0.008232	0.00806	0.00024012	1	less
AI110025	60	0.014069	0.014251	0.01417	0.014163	9.12952E-05	0.9999995	less
AI110025	70	0.017599	0.016168	0.016377	0.016715	0.000772514	0.9995707	less
AI11003	40	0.007491	0.007303	0.007408	0.007401	9.46655E-05	1	less
AI11003	60	0.012686	0.01289	0.012677	0.012751	0.000120308	0.9999999	less
AI11003	70	0.015234	0.015041	0.01492	0.015065	0.000158372	0.9999996	less
AI11004	40	0.008076	0.007995	0.009502	0.008524	0.000847507	0.9999735	less
AI11004	60	0.013905	0.013557	0.01382	0.013761	0.000181262	0.9999999	less
AI11004	80	0.021355	0.021462	0.021464	0.021427	6.23927E-05	0.8091579	not different
AI11005	40	0.00732	0.00746	0.00739	0.00739	7.01973E-05	1	less
AI11005	60	0.012989	0.013304	0.012635	0.012976	0.000334398	1	less
AI11005	80	0.018736	0.019327	0.018262	0.018775	0.000533875	0.9996696	less
AI11006	40	0.006131	0.006052	0.006662	0.006281	0.000331641	1	less
AI11006	70	0.014934	0.014488	0.014036	0.014486	0.000448905	0.9999995	less
AI11006	80	0.015631	0.015401	0.014889	0.015307	0.000379781	0.9999997	less
AI11008	40	0.006518	0.006136	0.005981	0.006212	0.000276331	1	less
AI11008	70	0.013374	0.013369	0.01311	0.013284	0.000150986	0.9999999	less
AITTJ11004	40	0.019765	0.020186	0.022173	0.020708	0.001285579	0.8463581	not different

AITTJ11004	50	0.030178	0.031168	0.030942	0.030763	0.000518769	5.88428E-07	greater
AITTJ11006	40	0.015269	0.015174	0.015265	0.015236	5.36392E-05	0.9999984	less
AITTJ11006	60	0.031206	0.030271	0.03042	0.030632	0.000502141	4.39924E-07	greater
AIXR11004	40	0.018449	0.018177	0.018408	0.018345	0.000146749	0.9999763	less
AIXR11004	50	0.022525	0.022108	0.022213	0.022282	0.000217246	0.06300948	greater
AIXR11004	60	0.030931	0.031271	0.030338	0.030847	0.000472128	1.93201E-07	greater
AIXR11005	40	0.016469	0.016754	0.017883	0.017035	0.000747552	0.9995615	less
AIXR11005	50	0.021269	0.021862	0.021756	0.021629	0.000315999	0.5928034	not different
AIXR11005	60	0.02926	0.02962	0.029896	0.029592	0.000318492	4.34512E-08	greater
AIXR11006	40	0.015077	0.015284	0.015571	0.015311	0.000248025	0.9999998	less
AIXR11006	60	0.025473	0.026945	0.026728	0.026382	0.000794756	0.000668561	greater
AVI110025	40	0.008128	0.008321	0.010171	0.008874	0.001128058	0.9997564	less
AVI110025	50	0.013415	0.013811	0.013526	0.013584	0.00020431	0.9999999	less
AVI11003	40	0.007737	0.007477	0.007662	0.007625	0.000134121	1	less
AVI11003	50	0.01079	0.010412	0.010491	0.010564	0.000199189	1	less
AVI11004	40	0.007512	0.007319	0.007396	0.007409	9.75749E-05	1	less
AVI11004	90	0.018536	0.019099	0.019095	0.01891	0.000324149	0.9999534	less
AVI11005	40	0.00946	0.008061	0.008133	0.008552	0.000787654	0.9999869	less
AVI11005	90	0.019989	0.020397	0.020209	0.020198	0.000203855	0.9985895	less
AVI11006	40	0.009738	0.009846	0.010031	0.009872	0.000148075	1	less
AVI11006	90	0.019746	0.02014	0.020201	0.020029	0.000246597	0.9991966	less
ID11003	40	0.007362	0.007258	0.007147	0.007256	0.00010777	1	less
ID11003	60	0.013131	0.012893	0.007147	0.011057	0.003388611	0.9851603	less
ID11004	60	0.01163	0.011235	0.011632	0.011499	0.000228852	1	less
TADF025	40	0.005632	0.006685	0.006197	0.006171	0.000526795	1	less
TADF025	90	0.022684	0.0243	0.027525	0.024837	0.002464756	0.07717446	greater
TADF03	D-	0.005446	0.005257	0.005182	0.005295	0.000136093	1	less
TADF03	D-	0.015345	0.015476	0.015507	0.015443	8.60243E-05	0.9999985	less
TADF04	D-	0.004941	0.004901	0.004902	0.004915	2.29435E-05	1	less
TADF04	D-	0.015807	0.01584	0.015654	0.015767	9.90228E-05	0.9999983	less

TADF05	D-	0.005733	0.005729	0.005733	0.005732	2.35771E-06	1	less
TADF05-D	90	0.018973	0.018391	0.018454	0.018606	0.000319324	0.9999766	less
TADF06-D	40	0.004818	0.003591	0.003658	0.004022	0.000690136	0.9999992	less
TADF06-D	90	0.012399	0.01323	0.011001	0.01221	0.001126192	0.9994315	less
TDXL11003	40	0.013708	0.013814	0.013255	0.013592	0.000296584	1	less
TDXL11003	55	0.015708	0.0151	0.015497	0.015435	0.000308942	0.9999998	less
TDXL11004	40	0.008001	0.007958	0.008228	0.008062	0.000145189	1	less
TDXL11004	60	0.013568	0.013569	0.013808	0.013648	0.000138628	0.9999998	less
TDXL11006	40	0.00576	0.005535	0.005461	0.005586	0.00015581	1	less
TDXL11006	90	0.015344	0.015345	0.015091	0.01526	0.000145962	0.9999994	less
TDXL11008	40	0.006088	0.006311	0.006159	0.006186	0.00011413	1	less
TDXLD02	40	0.016705	0.016911	0.016203	0.016606	0.000364261	0.9999988	less
TDXLD02	40	0.006968	0.006969	0.006966	0.006968	1.35174E-06	1	less
TDXLD02	70	0.014066	0.013775	0.013774	0.013872	0.000168409	0.9999999	less
TDXLD025	40	0.005262	0.005273	0.005366	0.0053	5.74765E-05	1	less
TDXLD025	70	0.014134	0.014137	0.014319	0.014197	0.000105787	0.9999995	less
TDXLD03	40	0.001248	0.001241	0.00125	0.001246	5.06322E-06	1	less
TDXLD03	90	0.010964	0.010701	0.009693	0.010453	0.000670926	0.9999957	less
TDXLD04	40	0.003549	0.003552	0.003553	0.003551	1.98819E-06	1	less
TDXLD04	90	0.010367	0.009781	0.010131	0.010093	0.000294853	1	less
TDXLD06	10	0.006006	0.006304	0.006117	0.006142	0.000150384	1	less
TDXLD06	40	0.003427	0.002978	0.002975	0.003127	0.000260361	1	less
TDXLD08	40	0.00149	0.001491	0.001482	0.001488	4.71294E-06	1	less
TDXLD08	80	0.003687	0.003686	0.003626	0.003666	3.51883E-05	1	less
TTI11002	40	0.006369	0.006784	0.006476	0.006543	0.000215437	1	less
TTI11002	70	0.014664	0.014584	0.014845	0.014698	0.000133681	0.9999995	less
TTI110025	40	0.005469	0.005468	0.005134	0.005357	0.000193192	1	less
TTI110025	70	0.01118	0.011584	0.011187	0.011317	0.000231168	1	less
TTI11003	40	0.006232	0.006222	0.006678	0.006377	0.000260441	1	less
TTI11003	70	0.014052	0.015812	0.01465	0.014838	0.000894847	0.9996181	less

TTI11004	40	0.006566	0.00668	0.006684	0.006643	6.73739E-05	1	less
TTI11004	80	0.022205	0.022595	0.021851	0.022217	0.000372171	0.10685	not different
TTI11005	40	0.007617	0.007615	0.007096	0.007442	0.000299935	1	less
TTI11005	80	0.021946	0.022501	0.022033	0.02216	0.000298436	0.1179666	not different
TTI11006	40	0.009935	0.0102	0.010144	0.010093	0.000139351	1	less
TTI11006	80	0.028286	0.030571	0.027988	0.028949	0.001413364	0.003245261	greater
ULD12004	40	0.007295	0.007363	0.007553	0.007404	0.000133734	1	less
ULD12004	70	0.016481	0.017255	0.016581	0.016772	0.000420761	0.9999967	less
ULD12005	40	0.010563	0.010952	0.011095	0.01087	0.000275129	1	less
ULD12005	70	0.028657	0.030841	0.029178	0.029559	0.001140572	0.001043344	greater
ULD12006	40	0.01218	0.012011	0.011674	0.011955	0.000257721	1	less
ULD12006	65	0.02352	0.023499	0.022584	0.023201	0.000534262	0.007584186	greater
testing day	**17-March-2015**							
Baseline Deposition, fraction of applied AIXR 11004 with GF-2726)	**mean**	**Std Dev**						
	0.021495	**0.00048**						
Nozzle with GF-3335	Pressure	fractional deposition at 30' downwind					p-value	statistical result vs. baseline
		replicate			Mean	Std Dev		
		1	2	3				
AI11002	80	0.021447	0.021373	0.021218	0.021346	0.000116581	0.6752239	not different
AI110025	80	0.020769	0.022786	0.019316	0.020957	0.001742735	0.6741734	not different
AI11003	80	0.018116	0.016358	0.016257	0.016911	0.001045321	0.9961586	less
AI11008	80	0.016257	0.015161	0.015864	0.015761	0.00055535	0.9999019	less
AVI110025	60	0.015393	0.014717	0.015056	0.015055	0.000338028	0.9999507	less
AVI11003	80	0.017787	0.017507	0.016441	0.017245	0.000710504	0.9991141	less
ID11004	40	0.007326	0.006951	0.007062	0.007113	0.0001925	0.9999696	less
ID11004	80	0.018094	0.01848	0.018509	0.018361	0.000231608	0.9988015	less
ID11005	40	0.00715	0.007596	0.008002	0.007582	0.000426364	0.9999983	less
ID11005	60	0.012554	0.012475	0.013078	0.012702	0.000327435	0.999982	less

MR11006	40	0.012324	0.012322	0.012066	0.012237	0.000148491	0.999827	less
MR11006	60	0.024029	0.02389	0.023861	0.023927	8.96675E-05	0.005354029	greater
MR11008	40	0.011142	0.011234	0.011196	0.01119	4.62545E-05	0.9996727	less
MR11008	70	0.02515	0.025237	0.025136	0.025174	5.45597E-05	0.002583414	greater
MR11010	40	0.019222	0.018825	0.018282	0.018777	0.000471882	0.9988979	less
MR11010	70	0.03931	0.037582	0.038433	0.038442	0.000864049	3.05337E-05	greater
TADF025	80	0.016467	0.017036	0.016274	0.016593	0.000396078	0.9998958	less
TDXL11003	80	0.024534	0.026189	0.026991	0.025905	0.001252598	0.008020489	greater
TDXL11004	80	0.020765	0.021605	0.021815	0.021395	0.000555268	0.5871297	not different
TDXL-D11002	90	0.020803	0.021788	0.021658	0.021416	0.000535033	0.5702392	not different
TDXL-D110025	90	0.017492	0.017836	0.017835	0.017721	0.000198417	0.9990477	less
TTI11002	80	0.016058	0.016504	0.016145	0.016236	0.000236361	0.999739	less
TTI110025	80	0.013711	0.014307	0.013294	0.013771	0.000509101	0.9999774	less
TTI11003	80	0.015859	0.016179	0.016109	0.016049	0.000167866	0.9994975	less
TTI11005	70	0.018863	0.019433	0.019624	0.019307	0.000396031	0.997935	less
TTI11006	60	0.020015	0.019927	0.01964	0.019861	0.000195961	0.9916877	less
ULD12004	80	0.020758	0.020841	0.020752	0.020784	4.9738E-05	0.9385885	less
ULD12005	50	0.012764	0.013074	0.012703	0.012847	0.000198786	0.9998944	less
ULD12006	60	0.020548	0.020918	0.02134	0.020936	0.000396209	0.9013407	less
testing day	18-March-2015							
Baseline Deposition, fraction of applied AIXR 11004 with GF-2726)	mean	Std Dev						
	0.019216	0.001205						
Nozzle with GF-3335	Pressure	fractional deposition at 30' downwind					p-value	statistical result vs. baseline
		replicate			Mean	Std Dev		
		1	2	3				
MR11006	50	0.016055	0.015876	0.015406	0.015779	0.000335211	0.9844516	less
MR11008	50	0.0162	0.016199	0.01562	0.016006	0.000334543	0.9819971	less
MR11010	50	0.021809	0.023822	0.02258	0.022737	0.001015975	0.009493441	greater

TDXL11004	70	0.016996	0.018187	0.016737	0.017307	0.000773195	0.953216	less
TDXL-D11002	80	0.01376	0.013625	0.014473	0.013952	0.00045583	0.9952089	less

Hipsky, Kerri (KA)

From: Wiley, Tracey (TR)
Sent: Friday, May 15, 2015 3:37 PM
To: Hipsky, Kerri (KA)
Cc: FAGUSRG
Subject: FW: Pay.gov Payment Confirmation: PRIA Service Fees

-----Original Message-----
From: notification@pay.gov [mailto:notification@pay.gov]
Sent: Friday, May 15, 2015 3:35 PM
To: Wiley, Tracey (TR)
Subject: Pay.gov Payment Confirmation: PRIA Service Fees

Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact Michael Yanchulis at (703) 347-0237 or yanchulis.michael@epa.gov.

Application Name: PRIA Service Fees
Pay.gov Tracking ID: 25LBCK9T
Agency Tracking ID: 74804829770
Transaction Type: Sale
Transaction Date: 05/15/2015 03:35:00 PM EDT

Account Holder Name: Tracey Wiley

Transaction Amount: $12,596.00
Billing Address: State Regulatory
Billing Address 2: 9330 Zionsville Road
City: Indianapolis
State/Province: IN
Zip/Postal Code: 462681054
Country: USA
Card Type: Visa
Card Number: **********4289

Registration Number: 62719-XXX GF-3335
Company Name: Dow AgroSciences LLC
Company Number: 62719
Action Code: R320

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 27, 2015

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

DOW AGROSCIENCES LLC
9330 ZIONSVILLE RD 308/2E
INDIANAPOLIS, IN 46268-1054

Report of Analysis for Compliance with PR Notice 11-03

Thank you for your submittal of 27-MAY-15. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 11-03. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

Completion of 21-Day Content Screen

PM- 23

EPA Reg. #(File Symbol) 62719-AOL

Decision # D_____

Data package delivered to you on 6/11/15 .
(date)

Jacket/Mini-jacket will be transferred to you today.
(Pick up from Document Center)

Thank you, S MEADOWS

Registration Division's 21-Day Content Team

62719 - AOL

E-SUBMISSION

Memorandum

Date: 6/4/15

To: PM 23, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a:
- ☒ fully accepted submission
- ☐ partially accepted submission
- ☐ rejected submission

21-Day Screen Completed by Contractor

21-Day Expires on 6-17-15

Jacket # 62719-AOL
MRID# 496333

Content Screen: Recommend to Pass/Fail

11-3 Review: Pass/Fail/NA

Overall Status: Recommend to Pass/Fail

Transfer This Jacket to:

STEPHEN SCHAIBE

PRIA 3 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

September 2012

21 Day Screen Start Date: 5-27-15

Experts In-Processing Signature: B.B. Date 5-29-15 Fee Paid: Yes ✓

Division management contacted on issues No_____ Yes _____ Date _____

EPA Reg. Number: 62719-AOL	EPA Receipt Date: 5-27-15

	Items for Review			Yes	No	N/A*
1	**Application Form** (EPA Form 8570-1) signed & complete including package type			X		
2	**Confidential Statement of Formula** all boxes completed, form signed, and dated (EPA Form 8570-4)			X		
	a) All inerts, including fragrances, approved for the proposed uses (see Footnote A)	**yes** X	**no**			
3	**Certification with Respect to Citation of Data** (EPA Form 8570-34) completed and signed (N/A if 100% repack)			X		
	Certificate and data matrix consistent					
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	**yes**	**no**			
	If applicable, is there a letter of Authorization for exclusive use only.					
4	**Formulator's Exemption Statement** (EPA Form 8570-27) completed and signed (N/A if source is unregistered or applicant owns the technical)					X
5	**Data Matrix** (EPA Form 8570-35) both internal and external copies (PR 98-5) completed and signed (N/A if 100% repack)			X		
	a) Selective Method (Fee category experts use)	**yes**	**no**			
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	**5 Copies of Label (Electronic labels on CD are encouraged and guidance is available)**			X		
7	**Is the data package consistent with PR Notice 86-5**			X		
8	**Notice of Filing included with petitions**					X

9	**If applicable for conventional applications, <u>reduced risk rationale</u>**			X
	<u>Required Data</u> and/or data waivers. See Footnote C.			
10	a) List study (or studies) not included with application			

Comments:

Jacket Received : 6-1-15

* Documentation : (Pass) / Fail
- Certification with Respect to Citation of Data from 70 MRID#
- Contacted the Submitter on 6-1-15
- received the document on 6-3-15

* Inerts : (Pass) / Fail
- Inert not listed in the database
- Contacted the Submitter on 6-1-15
- received the manufacturer letter on 6-4-15
- Inert added to the Database on 6-9-15 by A. Debeau
- Inert approved for Pre-Harvest application.

* PRN 11-3 : (Pass) Fail

MRID: 496333
- 49633308 rejected for TQ (47)
- Contacted the Submitter on 6-2-15
- Correction on the way per Submitter 6-3-15

JK 6-10-15

* Overall Status : (Pass) / Fail

Kang, Ji Yeon

From: Hipsky, Kerri (KA) <KAHipsky@dow.com>
Sent: Wednesday, June 03, 2015 4:18 PM
To: Kang, Ji Yeon; Fonseca, Diego (D)
Cc: Ashe, Anthony; Mccann, Geri; Downs, Teresa
Subject: RE: Submission to EPA: GF-3335 (EPA Reg.# 62719-AOL)

Joyce,

The amended report has been mailed to Geri McCann in overnight mail today, for arrival 6/4. Thank you!

~Kerri

From: Kang, Ji Yeon [mailto:Kang.Joyce@epa.gov]
Sent: Tuesday, June 02, 2015 1:45 PM
To: Fonseca, Diego (D)
Cc: Ashe, Anthony; Mccann, Geri; Downs, Teresa
Subject: Submission to EPA: GF-3335 (EPA Reg.# 62719-AOL)

Dear Mr. Fonseca,

My name is Joyce Kang and I am a contractor with the EPA. I am contacting you in regards to your submission in support of the product GF-3335 (EPA Reg.# 62719-AOL). We have found a deficiency with the submission that will need to be addressed:

1. For study MRID 49633308 "Low-Speed Wind Tunnel Droplet Size Spectrum Determinations with GF-3335," this study is incomplete; data is missing from the following page(s): 47

Please send the revised study to Geri McCann by CD submission. If you have any questions, please do not hesitate to contact me.

Kind Regards,

Joyce Kang

Contractor, US EPA
2777 S. Crystral Drive, S-4822
Arlington, VA 22202
(703) 347-0416
Email: kang.joyce@epa.gov

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 28, 2015

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OPP Decision Number: D-505414
EPA File Symbol or Registration Number: 62719-AOL
Product Name: GF-3335
EPA Receipt Date: 27-May-2015
EPA Company Number: 62719
Company Name: DOW AGROSCIENCES LLC

DIEGO FONSECA
DOW AGROSCIENCES LLC
9330 ZIONSVILLE RD 308/2E
INDIANAPOLIS, IN 46268-1054

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-2011-3 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R320

NEW PRODUCT;NEW PHYSICAL FORM;REQUIRES DATA REVIEW IN SCIENCE DIVISIONS;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 347-8961.

Sincerely,
Teresa Downs
Front End Processing Staff
Information Technology & Resources Management Division

Fee for Service

{969029D~

This package includes the following

- ◉ New Registration
- ○ Amendment

☑ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ___

for Division

- ○ AD
- ○ BPPD
- ◉ RD

Risk Mgr. 23

Receipt No. S-	969029
EPA File Symbol/Reg. No.	62719-AOL
Pin-Punch Date:	5/27/2015

☐ This item is NOT subject to FFS action.

Action Code:

Requested: R320

Granted: R320

Amount Due: $ 12,596

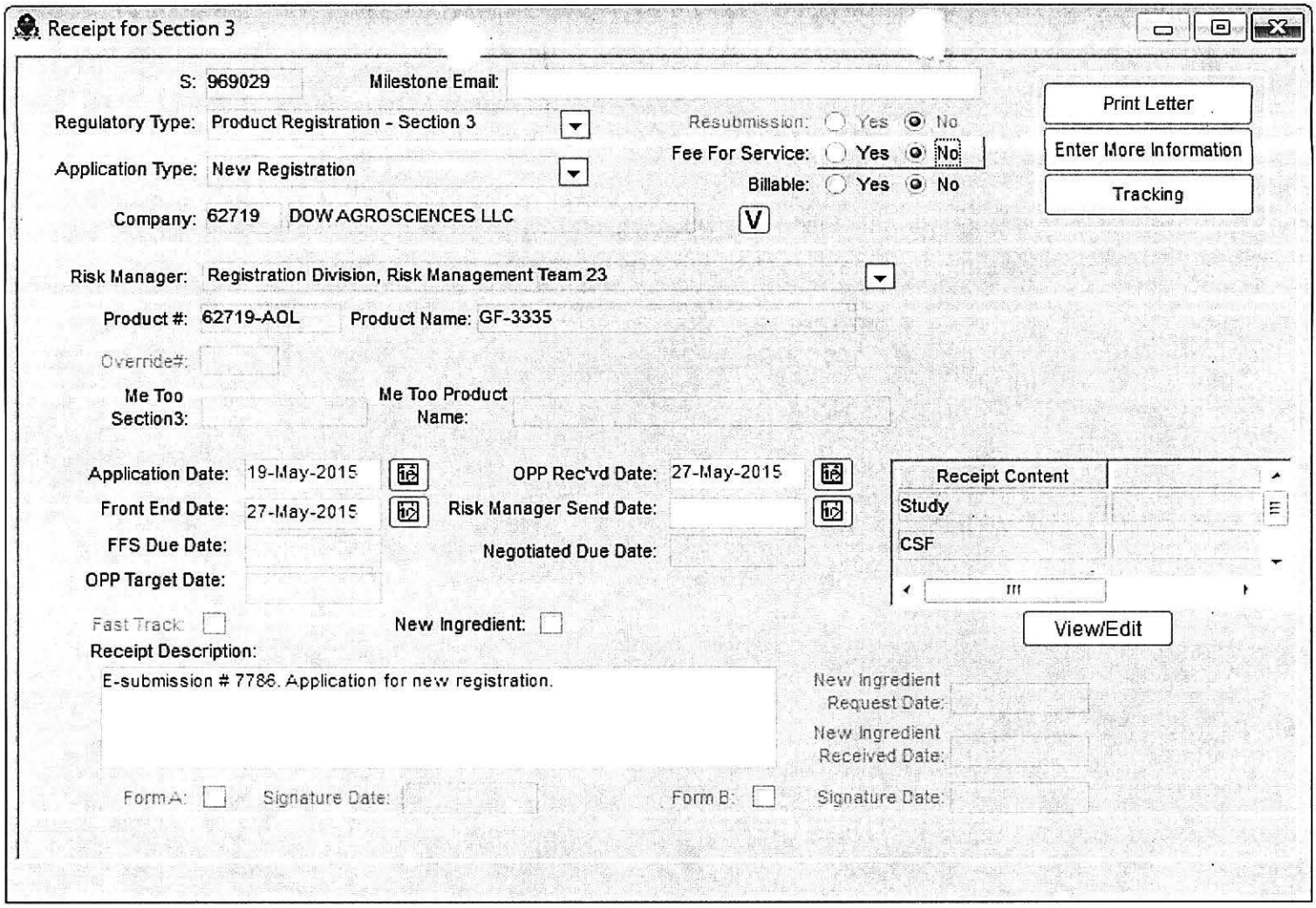
Parent/Child Decisions:

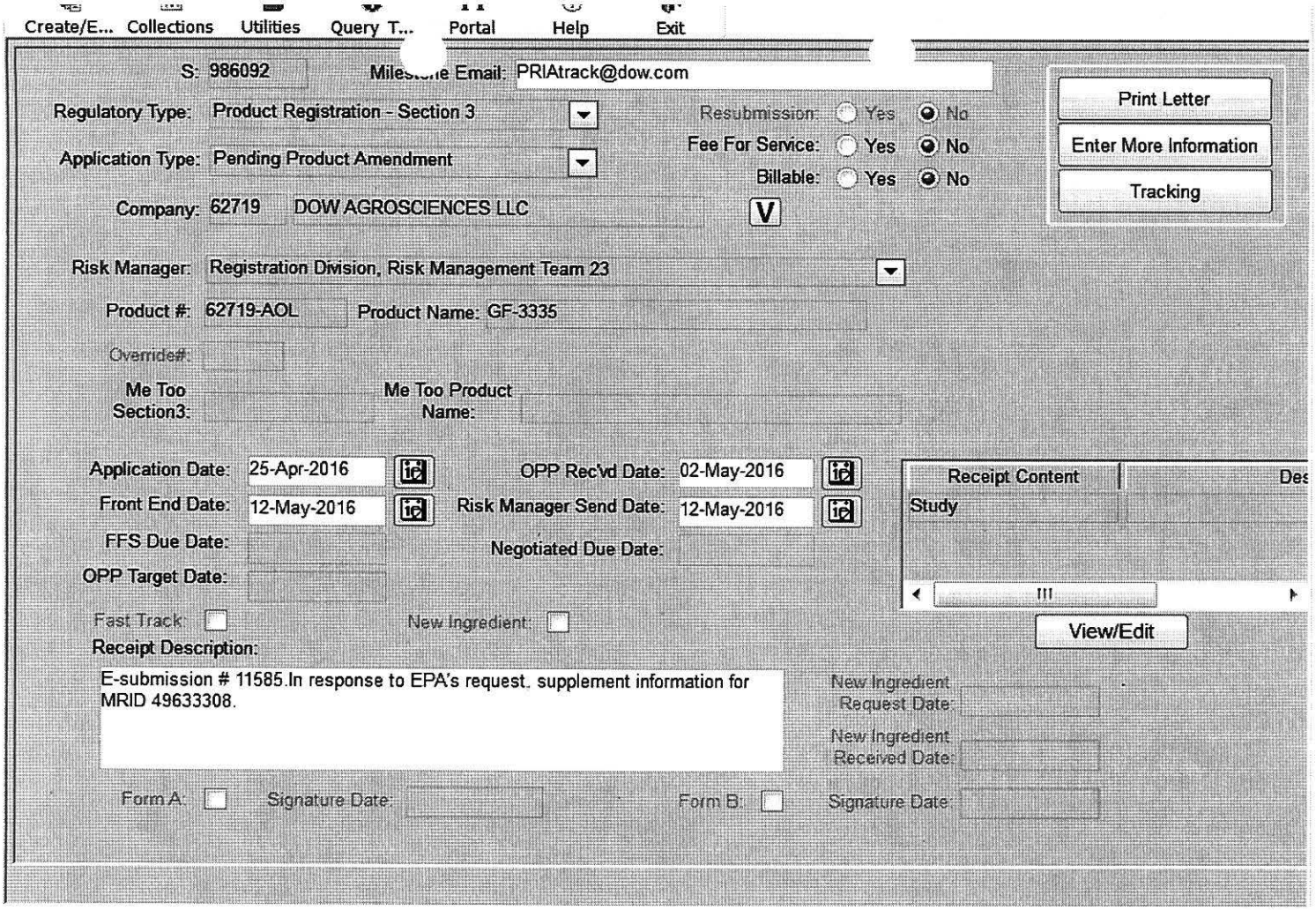
☐ Inert Cleared for Intended Use ☐ Uncleared Inert in Product

Reviewer: Bonnie Moore Date: 5-28-15

Remarks:

e-Submission


Receipt for Section 3
S: 969029
Milestone Email:
Regulatory Type: Product Registration - Section 3
Application Type: New Registration
Company: 62719 DOW AGROSCIENCES LLC
Resubmission: Yes No
Fee For Service: Yes No
Billable: Yes No
Print Letter
Enter More Information
Tracking
Risk Manager: Registration Division, Risk Management Team 23
Product #: 62719-AOL
Product Name: GF-3335
Override#:
Me Too Section3:
Me Too Product Name:
Application Date: 19-May-2015
Front End Date: 27-May-2015
FFS Due Date:
OPP Target Date:
OPP Rec'vd Date: 27-May-2015
Risk Manager Send Date:
Negotiated Due Date:
Receipt Content
Study
CSF
Fast Track:
New Ingredient:
View/Edit
Receipt Description:
E-submission # 7786. Application for new registration.
New Ingredient Request Date:
New Ingredient Received Date:
Form A:
Signature Date:
Form B:
Signature Date:


Create/E...
Collections
Utilities
Query T...
Portal
Help
Exit
S: 986092
Email: PRIAtrack@dow.com
Regulatory Type: Product Registration - Section 3
Application Type: Pending Product Amendment
Company: 62719 DOW AGROSCIENCES LLC
Resubmission: Yes No
Fee For Service: Yes No
Billable: Yes No
Print Letter
Enter More Information
Tracking
Risk Manager: Registration Division, Risk Management Team 23
Product #: 62719-AOL
Product Name: GF-3335
Override#:
Me Too Section3:
Me Too Product Name:
Application Date: 25-Apr-2016
OPP Rec'vd Date: 02-May-2016
Front End Date: 12-May-2016
Risk Manager Send Date: 12-May-2016
FFS Due Date:
Negotiated Due Date:
OPP Target Date:
Receipt Content
Study
Fast Track:
New Ingredient:
View/Edit
Receipt Description:
E-submission # 11585.In response to EPA's request, supplement information for MRID 49633308.
New Ingredient Request Date:
New Ingredient Received Date:
Form A:
Signature Date:
Form B:
Signature Date:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 12, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MR. BRUCE A. HOUTMAN
DOW AGROSCIENCES LLC
9330 ZIONSVILLE RD 308/2E
INDIANAPOLIS, IN 46268-1054

PRODUCT NAME: GF-3335
COMPANY NAME: DOW AGROSCIENCES LLC
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 62719-AOL
EPA RECEIPT DATE: 05/02/16

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 23, at (703) 305-1243.

Sincerely,

Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Fee for Service

{9860928~

This package includes the following

- ○ New Registration
- ◉ Amendment

☑ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ___

for Division

- ○ AD
- ○ BPPD
- ◉ RD

Risk Mgr. 23

Receipt No. S- 986092

EPA File Symbol/Reg. No. 62719-AOL

Pin-Punch Date: 4/26/2016

☑ This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: $ _____

Parent/Child Decisions:

☐ Inert Cleared for Intended Use ☐ Uncleared Inert in Product

Reviewer: Morgan FM Date: 5/12/16

Remarks: Resubmission of Supplemental Study

e-Submission

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060 Print Form

United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
Dow AgroSciences / 62719-AOL	Kathryn Montague	☒ None ☐ Restricted
4. Company/Product (Name)	**PM#**	
Dow AgroSciences / GF-3335	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

☐ *Check if this is a new address*

6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

☐ Amendment - Explain below.
☐ Resubmission in response to Agency letter dated _____
☐ Notification - Explain below.
☐ Final printed labels in response to Agency letter dated _____
☐ "Me Too" Application.
☒ Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

In response to EPA's request via emails enclosed for your reference, Dow AgroSciences is respectfully submitting supplemental information for MRID #49633308.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Metal ☐ Plastic ☐ Glass ☐ Paper ☐ Other (Specify) _____
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☐ Label ☐ Container		☐ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Diego Fonseca	Regulatory Leader	317-337-4693

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Fonseca	Regulatory Leader
4. Typed Name	**5. Date**
Diego Fonseca	April 25, 2016

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy

e-Submission

MRID# 49903100

Dow AgroSciences

Dow AgroSciences LLC
9330 Zionsville Road Indianapolis, IN 46268 USA

www.dowagro.com

308/2E
April 25, 2016

Document Processing Desk **(ESUB) (DATA)**
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attention: Kathryn Montague/PM-23 (7505P)

GF-3335 (AI: 2,4-D)
EPA REGISTRATION NUMBER: 62719-AOL
DATA SUBMISSION

In response to EPA's request via emails enclosed for your reference, Dow AgroSciences is respectfully submitting supplemental information for MRID #49633308.

Dow AgroSciences is submitting this submission electronically (e-PRISM.xml New Section 3 for **GF-3335**).

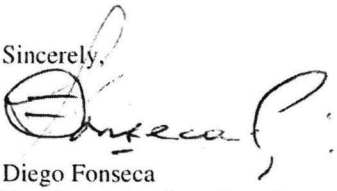
- CD containing e-PRISM.xml – Data Submission as follows:
  - Transmittal document (this letter)
  - Application for Pesticide, EPA Form 8570-1
  - Complimentary copies of EPA Communications
  - Raw Data for MRID #49633308
  - AGDISP model input file

Volume Guideline No.	MRID NO.	Study
Volume #2	49903101	Title: Supplemental Information for MRID 4963308 – Low-Speed Wind Tunnel Droplet Size Specrum Determinations with GF-3335 Author: Havens, P.L. Report Date: April 22, 2016 Study ID: 160687 Pages: 1-189 (1 pdf copy)

e-Submission

Your EPA PRIA confirmation can be sent to PRIAtrack@dow.com. If you require additional information, please contact , Regulatory Specialist at 317-337-4655 (rrbrown2@dow.com), or Kerri Hipsky, Registration Assistant for this product, at 317-337-7827 (kahipsky@dow.com).

Sincerely,



Diego Fonseca
Regulatory Leader – Regulatory Affairs
317-337-4693
317-337-4649 (FAX)
dfonseca@dow.com

Enclosures

DF/kh

Dow AgroSciences

Dow AgroSciences LLC
9330 Zionsville Road Indianapolis, IN 46268 USA

www.dowagro.com

308/2E
August 27, 2015

Document Processing Desk (**ESUB**)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attention: Kathryn Montague/PM-23 (7505P)

GF-3335 (AI: 2,4-D)
EPA REGISTRATION NUMBER: 62719-AOL
DATA SUBMISSION – TEXT FILES FOR MEAN SPECTRA DATA

In response to EPA's request on e-mail dated 19-August-2015 (enclosed for your reference), Dow AgroSciences is respectfully submitting text files for mean spectra data related to two study reports: various nozzles with GF-3335 (MRID No. 49633308) and GF-2726 tank-mix (MRID No. 49615001).

Dow AgroSciences is submitting this submission electronically (e-PRISM.xml New Section 3 for **GF-3335**).

- CD containing Data Submission as follows:
  - Transmittal document (this letter)
  - Application for Pesticide, EPA Form 8570-1
  - Text Files for Mean Spectra Data
  - EPA Correspondence dated August 19, 2015

Your EPA PRIA confirmation can be sent to PRIAtrack@dow.com. If you require additional information, please contact , Regulatory Specialist at 317-337-4655 (rrbrown2@dow.com), or Kerri Hipsky, Registration Assistant for this product, at 317-337-7827 (kahipsky@dow.com).

Sincerely,

Diego Fonseca
Regulatory Leader – Regulatory Affairs
317-337-4693
317-337-4649 (FAX)
dfonseca@dow.com

Enclosures

DF/kh

Pages 156-157*Confidential Statement of Formula may be entitled to confidential treatment*